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THESIS

ASSESSING RUSSIAN REACTIONS TO U.S. MISSILE DEFENSE

by

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September 2001

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The United States government intends to deploy strategic missile defense (MD) capabilities to address an emerging ballistic missile threat. Many opponents of MD have argued that this deployment will incite arms races. This could pose a serious threat to U.S. national security. This thesis employs arms race theory as an analytical framework to assess the potential implications of U.S. MD deployment—focusing in particular on the likelihood of arms competition with Russia. Two questions are explored. First, what drives Russian reactions to U.S. MD? Second, what are Russian capabilities to engage in arms competitions? Perceptions of U.S. unilateralism play a significant role in Russian leaders' assessments of MD. Russian concerns, however, appear to be dominated by prestige considerations and perceptions of diminishing superpower status. Although Russia possesses some ability to engage America in arms competition, its economic limitations are severe. By enhancing understanding of potential Russian reactions to U.S. MD, this thesis identifies ways to minimize the potential for arms competition. The thesis concludes with an analysis of policy options as America moves forward with MD.

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ASSESSING RUSSIAN REACTIONS TO U.S. MISSILE DEFENSE

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Submitted in partial fulfillment of the requirements for the degree of

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ABSTRACT

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EXECUTIVE SUMMARY

The United States government intends to deploy strategic missile defense (MD) capabilities. Yet, there is little domestic consensus on either the requirement for MD or the effects that a deployment might have. One of the more dire predictions of MD opponents is that U.S. MD will incite arms races with other nations. Conversely, many argue that not moving ahead with MD would increase danger to the American homeland and constrain U.S. action overseas due to increasing ballistic missile threats. The consequences of "getting it wrong" could be severe, because the potentially destabilizing outcomes of intensified animosities between the United States and powers such as Russia could pose a far more serious threat to U.S. national security than the emerging "rogue state" danger.

This thesis employs arms race theory as an analytical framework to assess some of the potential implications of MD deployment for U.S. national security—specifically with regard to U.S. MD's potential to incite arms competitions with Russia. The thesis asks the following questions: First, what might drive Russia to engage in an arms race in response to U.S. MD deployments? Second, what economic and military capabilities does Russia possess to pursue arms competition with the United States?

A. FINDINGS

Key U.S. decisions in the 1990s helped to foster a Russian view that U.S. intentions have become increasingly aggressive and hegemonic in nature. The United States-led NATO air operation in the Kosovo conflict in March-June 1999 appears to have contributed to Russian perceptions of a growing U.S. threat. The operation exacerbated a belief that Russia had lost its influence in international politics, and encouraged the perception (however mistaken) that the United States and its allies in NATO were willing to act outside the constraints of international law to achieve their political objectives.

Concomitant with growing Russian apprehensions over U.S. intentions, Russia experienced dramatic economic decline in the 1990s. With an economy faring little better today than that of many Third World states, in economic terms Russia has become a secondary power. As other indicators of strength have deteriorated (e.g., economic and

diplomatic influence), military strength—in particular, nuclear might—has arguably become Russia's sole remaining claim to superpower status. To the extent that U.S. MD diminishes this bulwark of Russia's military posture and this last vestige of Russian great power status, at least in Russian eyes, MD poses a serious threat to Russia's national security and international standing.

The potential consequences for U.S. MD deployment that follow from the above factors are that: (a) Russian leaders may mistakenly believe that U.S. MD is aimed at neutralizing Russia's ICBMs and SLBMs; (b) they may therefore assess U.S. MD as a threat to Russian security; and (c) they may fear that U.S. MD will threaten Russia's sole remaining claim to superpower status—its nuclear might. Arms race theory suggests that any of these perceptions could create incentives for arms competition.

Russia's ability to engage in arms competition is severely limited by its weak economy. It seems unlikely that a large-scale vertical arms race with the United States would be possible for Russia in the foreseeable future. This does not mean that Russia is without options. Of the range of military and diplomatic alternatives available to Russian leaders the most likely course would be withdrawal from arms reduction and verification regimes in combination with relatively minor adjustments to Russia's strategic force posture (e.g., MIRVing SS-27 ICBMs, retaining some older MIRVed ICBMs and enhancing the alert posture).

B. RECOMMENDATIONS

Incentives created by misperceptions of aggressive intent, calculations of strategic vulnerability, and concerns about national prestige may shape the Russian response to U.S. MD. On balance, the issue of prestige appears to dominate Russian calculations. It is noteworthy, however, that these three incentives are linked to a large degree. Issues of prestige, for example, likely fuel Russian perceptions of U.S. aggressive intentions and encourage greater attention to calculations of the strategic balance. These findings suggest three important areas of focus for U.S. MD policy vis-à-vis Russia.

First, increased clarity and transparency in U.S.-Russian MD discourse are essential to curb Russian perceptions of U.S. aggressive intent. In this regard, diplomatic

efforts (e.g., the conference for senior members of the Russian military staff in August 2001 to better explain U.S. MD architecture and capabilities) are appropriate.

Second, the extent of U.S. MD deployment should be weighed in light of: (a) U.S. objectives of eliminating threats of coercion, blackmail and attack from nascent missile states; and (b) Russia's concerns over strategic vulnerability. Although this analysis has concluded that it is unlikely that any presently conceived level of U.S. MD capability could negate the Russian strategic nuclear deterrent over the coming decade, the impact of U.S. MD on Russia's nuclear capabilities could be significant under certain conditions and could increase over time. This insight suggests that a degree of restraint in U.S. MD deployment may be advisable to minimize the potential for adverse Russian reactions. Given the limited technological and material resources of most "rogue states," a balance should be achievable—with respect to U.S. MD deployment levels—to reconcile the goals of (a) countering the threat of emerging missile states and (b) pursuing enhanced relations with Russia.

Third, Russian concerns about diminishing international prestige may be partially alleviated simply through continued dealings with Russia's leaders. The Bush Administration has already taken several important steps in this regard. The July 2001 G8 Conference in Genoa sent a clear signal that the United States, while resolved to pursue MD, views Russian security concerns as important.

By linking U.S. offensive arms reductions with further MD consultations, the above three areas of potential U.S.-Russian compromise are being addressed in parallel by the Bush Administration. First, the focus on increased dialogue and information exchanges has likely aided in reducing Russian apprehensions about U.S. intentions. Second, U.S. offensive arms reductions in conjunction with MD deployment may serve to alleviate Russian perceptions of a growing U.S.-Russian strategic imbalance. Most significantly, when U.S. leaders treat Russian leaders as virtually equal partners at the bargaining table, they are implicitly recognizing Russia's major power status.

It remains to be seen if the present U.S.-Russian consultations will be successful. Periods of apparent rapprochement in the past have ended in dispute. For example, plans

for U.S.-Russian cooperation in developing a Global Protection System showed significant promise in the early 1990s, but were abandoned by the Clinton Administration. The analysis in this thesis, however, supports the conclusion that the Bush Administration's current strategy for addressing Russian security concerns has significant potential for achieving a breakthrough in the highly contentious U.S.-Russian debate over missile defenses.

I. INTRODUCTION

A. THESIS OVERVIEW

The United States government intends to deploy strategic missile defense (MD) capabilities. The Bush Administration has made it clear that the question is no longer whether America will move ahead with MD, but rather how soon and to what extent. Yet, there is little domestic consensus on either the requirement for MD or the effects that a deployment might have. One of the more dire predictions of MD opponents is that U.S. MD will incite arms races with other nations. Conversely, many argue that not moving ahead with MD would increase danger to the American homeland and constrain U.S. action overseas due to increasing ballistic missile threats. The debate is not merely an academic one. The consequences of "getting it wrong" could be severe. The potentially destabilizing outcomes of intensified animosities between the United States and powers such as Russia could pose a far more serious threat to U.S. national security than the emerging "rogue state" danger.

This thesis employs arms race theory as an analytical framework to assess some of the potential implications of MD deployment for U.S. national security. The thesis focuses on U.S. MD's potential to incite arms competitions with Russia.

The use of the term "MD" in the thesis reflects the Bush Administration's merger of the national and theater missile defense concepts. Describing this change, Secretary of Defense Donald Rumsfeld stated:

What's 'national' depends on where you live, and what's 'theater' depends on where you live. My interest is in seeing if we can't find ways to develop defenses against ballistic missiles where we have interests...And so I've pretty much stopped using those words.²

For the purposes of this thesis, MD will refer only to those missile defense systems that have potential strategic capability. The term "strategic" in missile defense matters has historically been a function of range. In the strategic arms negotiations and

¹ George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," Fort Lesley J. McNair, Washington, D.C., 1 May 2001 http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html.

² Lee Ewing, "Why 'National' Has Been Dropped From 'National Missile Defense'," *Aerospace Daily*, 12 March 2001.

treaties between Washington and Moscow since 1969, ICBMs and SLBMs with ranges in excess of 5,500 km have been deemed "strategic" and thus treaty-accountable.

The research begins with the following question: What incentives might drive Russia to engage in an arms race in response to U.S. MD deployments? There is a substantial body of literature concerning state incentives in arms competitions. Robert Jervis's "spiral model" provides one theoretical rationale for arms race behavior. The theory is based upon the notion that misperceptions of aggressive intent between nations can lead to self-perpetuating cycles of increasing arms and escalating tensions. This model is relevant to the MD discussion because the declaratory policies of Russia today indicate beliefs that U.S. MD is aimed at them. In other words, these beliefs may reflect the necessary conditions for development of an arms race spiral.

However, the thesis also considers potential drivers of arms race behavior beyond the action-reaction cycle described by the spiral model. Colin S. Gray has suggested a range of alternatives to explain the phenomenon of arms competition (e.g., institutional and domestic pressures, response to aggression, diplomatic objectives, and damage limitation).⁴ Gray argues that states may engage in arms races for reasons of prestige. This motive may be particularly important in the Russian case because economic decline has left nuclear might as Russia's sole remaining claim to superpower status. Since U.S. MD capabilities may directly threaten this claim, considerations of international prestige and reputation may play a far more important role in determining Russian reactions to MD than perceptions of U.S. aggressive intent.

Gray further suggests that states may engage in arms races to support policy preferences (e.g., bureaucratic priorities). This argument suggests that Russia might utilize MD deployment as a rationale for pursuing policies its leaders favor irrespective of U.S. actions. There are some indications this dynamic is occurring in the Russian case, particularly in the military-industrial sector. For example, several Russian military officials expressed disappointment with President Clinton's September 2000 decision to

³ Robert Jervis, *Perceptions and Misperceptions in International Politics* (New Jersey: Princeton University Press, 1976) 64-76.

⁴ Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, 26 (January 1974), 207-233.

delay deployment of a limited U.S. MD. They seemed to hope that the "apparent threat" of U.S. MD might serve to boost a dramatically reduced military budget.⁵ Additionally, many senior Russian military leaders have reportedly expressed the view that U.S. withdrawal from the ABM Treaty would be a favorable outcome in that it would allow Russia to withdraw from the constraints of arms control agreements such as START I and the Intermediate-Range Nuclear Forces Treaty (INF). As Nikolai Sokov, a leading expert on Russian nuclear weapons policy, has stated:

From the point of view of the [Russian] military, expected withdrawal of the United States from the ABM Treaty can provide a welcome pretext, and this is part of the reason why some figures in the military leadership resist a possible deal on ABM amendments.⁶

The logic of crisis stability theory, which has served as a key tenet of U.S. thinking about nuclear deterrence, also may be useful in the assessment of prospects for arms race activity. During the Cold War, crisis stability theory examined the impact of various U.S. and Soviet force postures on incentives for either side to strike first in times of crisis. In other words, the main consideration was the interaction under various scenarios of adversaries with approximately equal offensive capabilities. If U.S. missile defenses could have defeated a Soviet nuclear counterstrike after a U.S. attack, the situation would have been considered unstable. U.S. MD deployments could thus create significant pressures for arms competition under certain circumstances: (a) if U.S. MD capabilities were so extensive and effective that they could defeat Russia's nuclear forces; and (b) if Russian leaders regarded the hypotheses of crisis stability theory as sufficiently persuasive to justify huge expenditures.

While the interests and incentives driving state decision-making can change rapidly, improvements in capabilities typically require more time. Even if Russia has strong incentives to respond to a U.S. MD system, it may lack the necessary resources. The second major question the thesis considers is therefore the economic and military

⁵ Pavel Felgenhauer, "Reactions to NMD Deferral," *The Moscow Times*, No. 2039, 7 September 2000.

⁶ Nikolai Sokov, "Developments in Russian Nuclear Weapons Policy," presentation to U.S. Senate Armed Services Committee, 26 January 2001, 20. Also see "Press Conference with Vladimir Orlov, Yuri Fyodorov and Dmitry Yevstafyev, PIR Center Officials, on RF-US Agenda," *Federal News Service, Inc.*, official Kremlin International News Broadcast, 14 June 2001; or Vitaliy Tsygichko, *Nezavisimaya Gazeta*, 9 June 2001. Translated by the Foreign Broadcast Information Service, entitled "Academic: Russia Should Accept Bush 'Partnership' Offer, Counter China 'Threat'," 11 June 2001 (FBIS-CEP20010611000096).

capabilities of Russia. States with both the incentives and the capacities to adversely affect U.S. security are the ones that U.S. leaders must consider with particular care as they determine the timing and nature of MD deployments. Cases in which incentives and capabilities do not match up can also provide important guidance on MD policy.

As part of the assessment presented in this thesis, the extent of U.S. MD deployment is varied in light of each element in the analytical framework outlined above. Three levels of potential U.S. MD deployment are considered. The first, a threshold missile defense capability, would be able to defend the United States homeland against fewer than ten missiles. The next level of missile defense would approximate the Clinton Administration's expanded "capability 1" system—a single site designed for homeland defense against approximately twenty missiles. Finally, a more extensive deployment, equating to the Clinton Administration's follow-on "capability 3"—a system incorporating multiple U.S. land-based sites—will be considered.⁷ The rationale for examining such a range of capabilities is two-fold. First, the Administration's plans and the likely technological success of a deployed system continue to be uncertain. Analyzing a range of capabilities adds flexibility to the assessment, and may enable it to accommodate any leadership decision. Second, the severity of Russia's response may depend heavily upon perceptions of the effectiveness and scale of the United States MD deployment.

It seems a statement of the obvious that Russia may consider more extensive U.S. MD capabilities as more threatening. What is not so obvious perhaps is that the threshold for when U.S. MD is deemed a threat will depend on a state's particular incentives and capabilities. The impact of a limited U.S. MD on Russia's substantial strategic deterrent force is likely to be negligible as compared with its effect on the smaller deterrent force of China, for example. U.S. MD capabilities could hypothetically convince some competitors to give up the race. As an illustration, a "rogue state" could see the ballistic missile competition as hopeless if the American MD system was so potent that the buy-in cost to the "missile club" was unacceptably high. An analysis of how Russia's threshold

⁷ See United States Congressional Budget Office, *Budgetary and Technical Implications of the Administration's Plan for National Missile Defense*, by Geoffrey Forden and Raymond Hall, April 2000, 10 August 2001 http://www.cbo.gov/showdoc.cfm?index=1984&sequence=0&from=5; and Appendix A for details on MD deployment specifications.

compares with other states may provide useful indications for the optimization of U.S. MD capabilities.

This thesis does not provide comprehensive and definitive answers to the ongoing MD deployment questions. As the above discussion suggests, many variables are likely to influence Russian responses to U.S. MD. By utilizing an analytical framework that focuses on both incentives and capabilities, however, the effort illustrates the complexities of the MD deployment decisions facing the United States.

B. METHODOLOGY

The thesis assesses the potential reactions of Russia to U.S. missile defense plans. Russian actions, capabilities and inferred interests are weighed in light of arms race theories. The results encompass a range of potential outcomes based upon varying degrees of U.S. MD deployment. Additionally, the thesis identifies potential complex interactions between Russia and other states. In terms of case study selection, Russia was chosen because of its crucial role in Eurasian stability and because it remains the only nation in the world with the power to destroy America.

C. ORGANIZATION

Chapter II of the thesis presents some of the central propositions of arms race theories and explains their relevance to the current MD debate. Strengths and weaknesses of the theories are also discussed. Chapter III consists of the Russian case study, and presents an application of the theoretical framework to Russian arms race incentives and actual capabilities. The chapter concludes with a discussion of the potential consequences and implications of U.S. MD deployments for U.S.-Russian relations. Chapter IV offers conclusions and suggestions for further research.

II. ARMS RACE THEORIES

This chapter addresses the incentives potentially driving states' reactions to a U.S. MD deployment. It is perhaps impossible to understand fully the driving influences behind another person's actions, let alone those of another nation. The bureaucratic, psychological and personal issues behind major policy decisions of states are subjects for extensive theoretical debate. A further complication is that the factors most critical in driving a particular decision may be highly contingent upon evolving conditions. For this reason it is beyond the scope of this thesis to offer more than an impressionistic analysis of the drivers of Russian reactions towards a U.S. MD deployment.

Given the above caveat, however, an extensive body of theoretical literature on arms competitions can be drawn upon to prepare such an analysis. This chapter describes some of the central tenets of the arms race theories that serve as the foundation for the case study concerning Russia. The scope is limited to aspects thought to be particularly applicable to arms competition in regard to U.S. MD deployment (e.g., deterrence of aggression, issues of prestige, diplomatic and strategic objectives, and assessments of strategic balance).

Colin S. Gray has defined an arms race as a condition "in which there should be two or more parties perceiving themselves to be in an adversary relationship, who are increasing or improving their armaments at a *rapid* rate and structuring their respective military postures with a *general* attention to the past, current, and anticipated military and political behavior of the other parties." Two elements of this definition will be emphasized with regard to Russian responses to U.S. MD deployment. First, the nature of the potential adversarial relationship—in terms of threat assessments and/or competing interests—needs to be identified to clarify the incentives for arms competition. It is clear, for example, that arms competition does not characterize the force posture interactions between closely allied states such as the Untied States and Britain. Second, there should be identifiable objectives (e.g., enhanced security, a stronger military, or additional operational options) connected with Russian arms race responses to U.S. MD. This latter

⁸ Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, 26 (January 1974), 208; emphasis in the original.

element is consistent with Gray's stipulation that competitors make military force posture changes with a "general" attention to the behavior of adversary states.

A. DETERRENCE AND THREAT PERCEPTIONS

The most familiar rationale for why states engage in arms competition relates to perceptions of threats to their national security. States may adjust their force postures in an attempt to deter other states from engaging in harmful activities by raising the potential costs of conflict to an unacceptable level. To the extent that an adversary's actions stem from hostile intent or expansionistic objectives, not to engage in an arms competition might actually invite attack from an aggressor. In this context, arms competition can serve an important function by preventing the outbreak of conflict.⁹

A somewhat related incentive for arms competition arises from state leaders' desires to achieve the best possible outcome should deterrence against an aggressor fail (i.e., in the event of war). Defensive strategies such as America's MD effort reflect such an approach. Many MD advocates view greater emphasis on defensive systems as crucial in combating the dangers posed by "rogue states," due to a belief that such nations will not be deterred solely by threats of offensive retaliation. Secretary of Defense William Cohen expressed this view in July 1999 when he stated, "Welcome to the grave New World of terrorism...a world in which traditional notions of deterrence and counterresponse no longer apply." U.S. leaders therefore seek to minimize the effects of an attack should their efforts to deter fail—in the best case entirely defeating the use of ballistic missiles by "rogue states" as tools of coercion or punishment.

It is clear that without hostilities, or some expectation thereof, the above justifications for arms races lack relevance. Given the United States government's assertion that MD is only directed at "rogue states," the question of factors driving Russian leaders' declared perceptions to the contrary needs to be addressed.

 $^{^9}$ Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, 26 (January 1974), 210.

¹⁰ Ibid., 211.

¹¹ William S. Cohen, "Preparing for a Grave New World," *The Washington Post*, 26 July 1999: A19. See also George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," Fort Lesley J. McNair, Washington, D.C., 1 May 2001 http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html.

1. Spiral Model

Why might Russia consider U.S. MD deployment as threatening, when from a U.S. perspective missile defenses represent a non-aggressive approach to strategic security vis-à-vis "rogue states"? Robert Jervis has suggested that misperceptions of aggressive intent are common in inter-state relations, and often play a defining role in inciting arms competitions.¹² Four characteristics underlying state interactions help to explain this phenomenon. The first characteristic stems from the notion that inter-state political interactions occur in an anarchic setting. Thomas Hobbes argued in *Leviathan* that the natural condition of man is characterized by competition and war.

...if any two men desire the same thing, which nevertheless they cannot both enjoy, they become enemies; and in the way to their End...endeavor to destroy, or subdue one another...And from this diffidence of one another, there is no way for any man to secure himselfe, so reasonable, as Anticipation; that is, by force, or wiles, to master the persons of all men he can, so long, till he sees no other power great enough to endanger him...Hereby it is manifest, that during the time men live without a common Power to keep them all in awe, they are in that condition which is called Warre...¹³

Hobbes suggests that the formation of governed societies allowed escape from this miserable and anarchic existence. According to Hobbes, the function of sovereigns (or governments) is to establish and enforce common laws, practices and mores, and thereby to regulate the cooperative behavior of individuals within society for mutual benefit. Nation-states can be seen as providing such a function today for individuals.

However, in inter-state interactions there is no commonly accepted sovereign to guide cooperative behavior. While the Charter of the United Nations (UN) states that the Security Council has "primary responsibility for the maintenance of international peace and security" (Article 24), the UN Charter acknowledges that the Security Council may not be able to fulfill this responsibility. According to Article 51 of the UN Charter, "Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a member of the United Nations, until the

¹² Robert Jervis, *Perceptions and Misperceptions in International Politics* (New Jersey: Princeton University Press, 1976) 64-76.

¹³ Thomas Hobbes, *Leviathan*, ed. Richard Tuck (Cambridge, England: Cambridge University Press 1991), first published in 1651, 87-88.

Security Council has taken measures necessary to maintain international peace and security."¹⁴ Consequently, states must on occasion defend their interests by forceful means rather than through adjudication by a higher authority. This creates a condition in which state interactions often assume the characteristics of Hobbes's anarchic world.

...yet in all times, Kings, and Persons of Soveraigne authority, because of their Independency, are in continual jealousies, and in the state and posture of Gladiators; having their weapons pointing, and their eyes fixed on one another; that is, their Forts, Garrisons, and Guns upon the Frontiers of their Kingdomes; and continuall Spyes upon their neighbors, which is a posture of War.¹⁵

Such a condition encourages leaders to make cautious assumptions about the intentions of others because the results of mistaken judgments could prove fatal.

Second, practical barriers to understanding may complicate inter-state relations. Because states interact in an anarchic world, they are reluctant to conduct completely transparent discourse. States withhold critical information, act in secrecy, and maneuver for bargaining position at all times to remain competitive. Barriers imposed by differing values, history and even language may also impair inter-state understanding. Such an effect may be relevant to U.S.-Russian relations, in view of the cultural and historical differences.

A third characteristic of inter-state relations is psychological. Jervis argues that people tend to interpret others' actions based upon their own beliefs and values. This effect may be particularly strong in an environment in which the information is ambiguous and uncertain, such as the international diplomatic arena. Moreover, once an image of another state's actions has been formulated, subsequent ambiguous information about that state tends to be interpreted in light of that image. Thus, nations on friendly terms will often forgive one another's harmful policies or actions as mistakes, while adversary nations often interpret even benign actions as hostile in intent.

¹⁴ United Nations Charter cited in David S. Yost, *NATO Transformed: The Alliance's New Role in International Security* (Washington, DC: United Institute of Peace Press, 1998) 19-20.

¹⁵ Thomas Hobbes, *Leviathan*, ed. Richard Tuck (Cambridge, England: Cambridge University Press 1991), first published in 1651, 90.

¹⁶ Robert Jervis, *Perceptions and Misperceptions in International Politics* (New Jersey: Princeton University Press, 1976) 68.

The final characteristic, which is related to the third, is that it is often difficult for state leaders to appreciate the concerns and interests of other states. Herbert Butterfield describes this dynamic:

It is the peculiar characteristic of the...Hobbesian fear...that you yourself may vividly feel the terrible fear that you have of the other party, but you cannot enter the other man's counter-fear...For you know that you yourself mean him no harm...and it is never possible for you to realize or remember properly that since he cannot see the inside of your mind, he can never have the same assurance of your intentions that you have.¹⁷

If U.S. leaders believe their intentions in seeking MD to be clear—that is, to gain protection against small attacks by "rogue states"—they may discount Russian objections to MD.

The basic pattern that results from the four characteristics outlined above—what Jervis has dubbed the "spiral model"— is that a state that increases its ability to defend itself creates two outcomes—one good, one bad. Initially this state becomes more secure, because it has improved its military capabilities. But this state's increased security decreases the security of competing states in turn because they view power relationships as a zero-sum game. Competitor states, feeling thus endangered, will then seek to increase their own military capabilities to meet the perceived threat of the first state. The result is to negate any added security the first state had achieved, while escalating the overall level of distrust. One manifestation of this self-perpetuating cycle of escalatory behavior is an arms race.

Application of the spiral model to the United States MD deployment question suggests that the following dynamic could occur. First, U.S. leaders know that they are only deploying MD to counter the threat of "rogue" states. From this viewpoint, then, Russia has no reason to feel threatened by U.S. MD. Second, because U.S. intentions on MD are believed to be clear, any negative reactions by Russian leaders (including their current political declarations) may either not be taken seriously or considered as unwarranted agitation against U.S. interests. This might then precipitate further U.S. actions (e.g., unilateral withdrawal from the ABM Treaty). Finally, the Russians, having

¹⁷ Herbert Butterfield quoted in Robert Jervis, *Perceptions and Misperceptions in International Politics* (New Jersey, Princeton University Press, 1976) 69.

believed that the United States MD program was calculated from the start to magnify U.S. military strengths, will respond with further actions (e.g., arms investments, coalitions). In a worst-case scenario this cycle would continue as each side escalates in response to the other until at last major hostilities occur.

Elements in the present international MD debate suggest that perceptual distortions—as outlined above—may play an important role in Russian (and Chinese) responses to U.S. MD. Talking points from a July 2001 White House policy guidance paper to U.S. embassies summarize the Bush Administration's intentions regarding MD, and are reminiscent of the language of the spiral model.

We [the United States] have said all along that we seek missile defenses to deal with the threat of blackmail and terror by rogue states...Defense procurement is a *very transparent process* in the United States. The limited scale of long-range missile defenses we seek *will be clear to all*...The limited missile defense that we will deploy *would not in any way undercut* the Russian nuclear deterrent, even at levels below those reportedly being contemplated by Russia. With regard to China, *we do not view China as an enemy*, and our limited *missile defenses are not directed at it*. Furthermore, *missile defenses are not provocative*. These *purely defensive weapons* can only be used to defeat an incoming missile launched by an aggressor or a missile launched by accident.¹⁸

In contrast, Russian and Chinese leaders have repeatedly declared they do not see U.S. intentions as transparent or benign. The July 2001 Sino-Russian Treaty on Good Neighborly Friendship and Cooperation stated in part:

Russia and China uphold the strict observance of generally recognized principles and norms of international law against any actions aimed at exerting pressure or interfering...with the internal affairs of sovereign states...Taiwan is an integral part of China...Russia and China stress the basic importance of the Antiballistic Missile Treaty...[and] speak out for maintaining the treaty in its current form.¹⁹

^{18 &}quot;Administration Missile Defense Papers," White House cable, 11 July 2001. Carnegie Endowment for International Peace Homepage, 26 July 2001

http://www.ceip.org/files/projects/npp/resources/EmbassyCableMD.html; emphasis added.

¹⁹ See "In the Treaty's Words: 'International Stability'," *New York Times on the Web*, 11 July 2001, 10 August 2001; and Patrick E. Tyler, "Russia and China Sign 'Friendship' Treaty," *New York Times on the Web*, 17 July 2001, 10 August 2001 http://partners.nytimes.com/2001/07/17/i.../17RUSS.html.

The Treaty further promises Sino-Russian consultations in response to pressure or aggression from another power. While not directly stated, it is clear that many of the issues identified in the treaty are directly aimed at U.S. MD policy initiatives.²⁰

Such declarations imply that Moscow and Beijing hold perceptions consistent with a spiral model explanation for arms competition. Specifically, they form a picture of the United States discounting the security concerns of other nations because: (a) it assumes its intentions are clearly understood; and (b) it therefore fails to recognize the threatening appearance of its policies in the eyes of states planning according to Hobbesian assumptions.

Weaknesses in the spiral model may degrade its predictive value in certain cases. The model applies with greater relevance when assessing the behavior of status quo powers. It tends to lose value when analyzing states with genuinely aggressive objectives. A blatant example of this shortcoming of the concept may be found in the pre-World War II conciliatory behavior of Britain and France vis-à-vis Nazi Germany. Repeated attempts to understand and accommodate the stated security concerns of Adolf Hitler led to a series of concessions specifically aimed at avoiding an escalation of antagonism and subsequent spiral-type behavior. As was subsequently demonstrated, however, Hitler's objectives were not to maintain the status quo or to satisfy limited demands, but rather to seek dominance in Europe and beyond. With such aims, each concession to Germany was seen by Hitler as proof of British and French weakness, and an opening for further conquests. Advocates of deterrence theory would argue that strength and resistance were required to check such an aggressor.

This insight may be relevant to the current MD discussion. For example, if current Chinese resistance to U.S. MD is actually more a function of Beijing's long-term objectives to dominate the Asian-Pacific region, rather than stated concerns about U.S. hegemony,²² an appropriate response for U.S. policy might be the deployment of missile

²⁰ Ibid.

²¹ Robert Jervis, *Perceptions and Misperceptions in International Politics* (New Jersey: Princeton University Press, 1976) 84-85.

^{22 &}quot;China: Who's real threat to world peace?" *China Daily*, 5 July 2001; or see Jiang Zemin, "Statement by President Jiang Zemin of the People's Republic of China at the Millennium Summit of the United Nations," 7 September 2000, 12 August 2001 http://www.fmprc.gov.cn/eng/5849.html.

defenses as a deterrent. Not to deploy MD could encourage further Chinese ambitions in much the same way as French and British restraint incited Nazi Germany's ambitions. The conclusions of the spiral model, however, would lead to greater U.S. restraint in deploying missile defenses to avoid Chinese perceptions of U.S. hegemonic intentions—i.e., precisely the opposite recommendation of deterrence theory.

In assessing the Russian case, however, there are several reasons why the above weakness of the spiral model may not apply. First, trends in the Russian military over the last decade have, if anything, been towards force structure reductions and a slower operational tempo. Even the actions within Russia's frontiers, such as the operations in Chechnya, have been challenging for the Russian armed forces. Second, Russia does not appear to possess sufficient economic means to pursue territorial expansion in the foreseeable future, even if it preferred such a course.

2. Crisis Stability

The theory of crisis stability is customarily connected with notions of threat assessment—particularly with regard to nuclear weapons. The precise meaning of the term crisis stability has varied in the literature over the years. During the Cold War the term was most often utilized in the context of the American-Soviet strategic nuclear relationship, and referred to the impact various force postures might have on incentives to strike first in times of crisis. In other words, the main consideration was the dynamics of the offense-defense relationship between adversaries with approximately equal capabilities. Three scenarios that could occur between Russia and the United States with regard to U.S. MD deployment are illustrative of this concept, and further highlight potential incentives for arms competition arising from U.S. MD. These are extreme hypothetical scenarios and inherently implausible conjectures owing to the great risks in any operational use of nuclear weapons.

The first case is the status quo. At present the United States possesses no strategic MD system while Russia maintains a system capable of providing very limited protection of its capital city of Moscow. With today's offense-defense relationship, each side retains the capability to retaliate and cause unacceptable damage after absorbing a first-strike from the other. Stability is maintained because U.S. and Russian vulnerability to unacceptable damage in a nuclear exchange is assured. In other words, the costs of

conflict are so high that both states are deterred from aggressive action. This describes the condition sometimes called mutual assured destruction (MAD).

A second scenario would be one in which the United States begins deploying a moderate MD system while Russia maintains its current force posture. Depending upon Russian perceptions of the relative capabilities of U.S. MD vis-à-vis its own offensive nuclear force, Russia may well believe that the growing imbalance will eventually degrade its strategic deterrent capability, giving the United States increased flexibility and incentives to strike first. The reason why U.S. incentives to strike first might increase in this situation derives from the notion that a temporary window of opportunity for U.S. adventurism would open due to the escalation dominance MD would confer. If no U.S. attack took place, however, this window could close as Russia adjusted its own force posture to reestablish U.S. vulnerability. The notion that the United States would attack Russia under today's circumstances may seem ludicrous to U.S. decision-makers. However, as was discussed with the spiral model, states guided by Hobbesian assumptions typically resort to capabilities-based planning and worst-case interpretations of the behavior of their rivals.

During the transition to such a U.S. defense system, therefore, Russian leaders may perceive incentives to hedge against the developing imbalances. In the worst case, Russian leaders might have increased incentives to strike first before the United States was able to fully deploy MD and establish a strategic advantage. Such an attack would be extremely implausible, however, because of its suicidal consequences for Russia. Another option could be to tolerate the imbalance, thus accepting a diminished ability to influence future U.S. actions through nuclear threats, at least in some circumstances. In this case, Russian leaders would essentially have to have greater confidence in America's restraint. Lastly, Russia might try to match the evolving U.S. capabilities by improving its offensive forces to overcome a U.S. defensive system and/or by counterbalancing with equivalent strategic defense capabilities of its own (i.e., engage in arms competition). Once the United States MD capabilities were deployed, the uncertainty created by U.S.

defenses would undoubtedly play into Russian decision-making. The likely result would be to reduce first-strike incentives and to reestablish crisis stability.²³

In a third hypothetical case both Russia and the United States would have established substantial MD systems. Even in this instance, however, instability could occur. Depending upon perceptions of the offense-defense balance, either side might believe that by attacking first it could reduce the enemy's offensive capabilities to such a degree that the subsequent "ragged retaliation" would be survivable.²⁴

The changed post-Cold War context calls into question the usefulness of crisis stability theory in this analysis of arms race incentives. Today's relationship between Washington and Moscow differs from that during the Cold War era, in that levels of animosity have significantly diminished.

A second problem with application of crisis stability theory to the MD debate concerns the level of effectiveness of MD. A key assertion of U.S. MD advocates, particularly as it relates to Russia, is that MD poses no conceivable threat to crisis stability because Russian strategic nuclear forces could easily overcome any planned U.S. MD system. However, Moscow may believe that U.S. MD will work very well, even if this belief is incorrect. America is the world's technological leader, and the fear of a rapid expansion of U.S. MD capabilities after an initial deployment is apparent in some Russian assessments. In other words, Russian perceptions of U.S. MD's eventual capability may be more important than U.S. MD's demonstrable capacity in the near-term. Although a limited U.S. MD might pose little threat to Russian arsenals initially, the effect of U.S. MD over time could increase with continued investments. These considerations could lead states once again to alarming interpretations of the impact of a U.S. MD deployment.

A more fundamental problem with crisis stability theory, as well as with the other arms race incentives addressed thus far, is that it potentially oversimplifies arms competition. That is, it depicts a process of action and reaction in which perceptions of

²³ Weinberg, Alvin and Jack Barkenbus, *Strategic Defenses and Arms Control* (New York: Paragon House Publishers, 1988) 102.

²⁴ Wilkening, Dean and Kenneth Watman, *Strategic Defenses and First-Strike Stability* (Santa Monica, CA.: RAND Corporation, 1986) v.

threat and precise calculations of the strategic balance are the crucial drivers. As previously noted, however, many variables beyond such a straightforward appraisal may influence arms race behavior.

B. ALTERNATIVES

1. Diplomacy

Nuclear weapons have played an important role in defining state power for over fifty years. It is noteworthy that the five permanent members of the United Nations Security Council are also the top five nuclear weapons states. States may pursue strategic weapons in order to attain increased diplomatic weight in international politics.²⁵ The pursuit of costly ballistic missile programs by economically impoverished states such as North Korea may be illustrative of this driver of arms competition.

Because U.S. MD may threaten the leverage states obtain from their ballistic missile programs, strong incentives to counter U.S. MD may be generated. For example, a foundation of Russia's diplomatic influence and power projection in the world has been its military potential. In the face of severe economic and conventional military decline (i.e., as other measures of international power have diminished), Russian leaders must now rely on nuclear might to an even greater extent in diplomacy and security. Although it is unlikely that any level of U.S. MD in the near-term could defend America and its allies against the numbers of missiles Russia could bring to bear, the political impact of U.S. MD deployments in this regard could be significant.

Furthermore, Russia has sought to link threats of withdrawal from existing arms control and non-proliferation regimes to U.S. MD. The carrying out of such threats would essentially equate to arms competition with the United States—though in a less direct way than traditional notions of a "vertical" offensive weapons buildup. Promoting missile and weapons of mass destruction (WMD) proliferation by other states would constitute a "horizontal" form of arms competition by Russia. In this context, then, Russia could be seen as utilizing the threat of arms competition to achieve diplomatic objectives in other areas—U.S. offensive arms reductions, for example.

²⁵ Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, 26 (January 1974), 214-216.

2. Reputation

The maintenance of state reputation also can be an important incentive for arms competition.²⁶ A state's prestige (i.e., relative standing in the international community) is a function of numerous factors. Economic and military powers are two of the most important considerations. Such factors can be instrumental in allowing states a seat at the international bargaining table. In the case of North Korea, for example, it could be argued that disproportionate attention is being paid to North Korean leaders largely as a function of North Korea's military potential—in particular, its ballistic missile program.

Some of the changes since the Cold-War era help to illustrate this notion of prestige. Until the early 1990s, the prominence of the Soviets and the Americans in world politics gave them preponderant influence with their respective allies and security partners. A measure of the importance of this bi-polar arrangement to Soviet leaders was the maintenance of the arms competition with America in the face of the USSR's impending economic collapse. Today, Russia's arsenal remains substantial but is deteriorating at a rapid pace. The impact of U.S. MD on the Russian-U.S. strategic balance may exacerbate this power diminution. In this light, Russians may fear that U.S. MD will play a critical role in eroding Russia's last remaining claim to superpower status—its nuclear might. This fear could be an element in a Russian decision to engage the United States in an arms competition.

3. Convenience

Gray has argued that states may engage in arms competition because "an external pacer of military endeavor is both convenient and necessary to the racing agents." Such an incentive for arms competition could play a role at several levels. At the level of the state leadership, increased military strength may be a goal for reasons not directly related to the declared justification for arms buildup. Russian leaders might use arguments of a U.S. threat (e.g., U.S. MD deployment) to rationalize expansion of military defense budgets and withdrawal from expensive or irksome treaty obligations. Such arguments might prove particularly appealing in the present state of fiscal austerity in the Russian military.

²⁶ Ibid., 224-227.

²⁷ Ibid., 216-219.

Although this thesis does not extensively analyze intra-state actors (i.e., bureaucratic or institutional actors) potentially driving Russian responses to U.S. MD, it is important to note their role. Some military elites appear to have an interest in identifying threats that are supportive of desired force structure, budget or acquisition objectives. For example, several key Russian military leaders expressed disappointment with President Clinton's September 2000 decision to delay deployment of a limited U.S. MD. They appeared to hope that the "apparent threat" of U.S. MD might serve to boost a dramatically declined military budget.²⁸

Organizational inertia—fostered by standard operating procedures—in the Russian military could also play an important role in driving such a reaction. If Russian military leaders are accustomed to traditional concepts of strategic deterrence (owing to decades of force planning), they may be in search of a familiar mission. The argument that the United States military force structure is still planned and configured for an environment that no longer exists (i.e., the Cold War) is also reminiscent of this concept of organizational inertia.

Arms competition also may support the purposes of the political constituencies served by the state's military-industrial complex. One need look no further than American ship construction to understand how such forces can exert a powerful influence over political decision-making. The city of Newport News, Virginia, survives to a great extent as a function of the profitability of Newport News Shipbuilding. A major part of this company's profits hinge upon a routine level of nuclear aircraft carrier overhauls and new construction. Over the last decade, the wisdom of retaining large aircraft carriers as the keystone of the United States Navy has repeatedly come under challenge. Companies such as Newport News Shipbuilding can bring powerful political forces to bear in resisting such challenges. Gray has argued, however, that the empirical evidence is lacking to support a claim that a state's military-industrial complex can be the initiator of arms competition or war.²⁹ As a factor influencing the rate and inertia of inter-state arms competitions, however, such considerations may be significant.

²⁸ Pavel Felgenhauer, "Reactions to NMD Deferral," *The Moscow Times*, No. 2039, 7 September 2000.

²⁹ Colin S. Gray, "The Urge to Compete: Rationales for Arms Racing," *World Politics*, 26 (January 1974), 221.

C. CONCLUSIONS

Russian reactions to U.S. MD might be influenced by domestic factors as much as by purposeful leadership decisions. The argument for concentrating the analysis at the leadership level is based upon two considerations. First, based upon the declaratory policies of Russia's leaders, U.S. MD is perceived as having the potential to harm Russian national security interests. Such consequences would most likely draw key leaders into the decision-making process. Second, responses to U.S. MD (e.g., force posture adjustments associated with an arms race) would likely demand a significant commitment of state resources. Here, also, state leaders would likely play an active role. There is considerable evidence of direct leadership involvement in the MD debate. The efforts of President Vladimir Putin to stop U.S. MD (e.g., UN Conference on Disarmament talks, extensive travel throughout Eurasia and the July 2001 Sino-Russian Friendship Treaty) illustrate this point. Although the focus on leadership decision-making is considered sufficient for the purposes of this thesis, the discussion highlights the need for further research regarding intra-state dynamics to fully assess the potential for U.S. MD to incite arms competitions with Russia.

No straightforward quantitative methodology can be applied to the analysis of incentives driving arms competitions. The reason for this is twofold. First, Russian leaders' perceptions of U.S. MD policy are an inherently subjective and uncertain matter. In fact, the spiral model would suggest that the leaders themselves are not fully aware of their own biases and perceptions. Second, due to a lack of access to the personal reflections of the state leaders it cannot be concluded with reasonable certainty whether their public statements correspond to their actual beliefs or are merely political posturing. The approach taken in subsequent chapters assumes that the public statements and international activities of the leaders reflect a "true" picture of their perceptions of U.S. missile defense.

III. RUSSIA

The present opposition of Russian leaders to U.S. MD may seem perplexing from an American perspective. U.S. leaders do not view Russia as the target of MD deployment, and have repeatedly declared that the primary purpose of an MD system is to address the evolving threat of "rogue states." Furthermore, many analysts judge it is unlikely that any level of MD deployment could negate the substantial Russian strategic nuclear deterrent in the near term. Lastly, U.S. MD advocates note that fundamental improvements in U.S.-Russian relations since the collapse of the Soviet Union have made the notion of U.S.-Russian conflict remote. In a May 2001 address at the United States National Defense University, President Bush stated, "Today's Russia is not yesterday's Soviet Union. Its government is no longer Communist. Its president is elected. Today's Russia is not our [America's] enemy." From the American perspective, then, Russian leaders appear to have little to fear from a U.S. MD deployment.

Why, then, do Russian leaders assert that U.S. MD poses a threat to their national security, and will incite an arms competition? This chapter examines three major categories of Russian objections to MD in light of specific arms race theories discussed in Chapter II. First, the declarations and diplomatic activities of Russian leaders have repeatedly suggested that they view U.S. behavior as increasingly hegemonic. The pattern of discourse that has developed between U.S. and Russian leaders with regard to MD illustrates this Russian perspective and is reminiscent of the language of the spiral model. Second, Russia's economic decline over the last decade has necessitated major reductions in its military forces. Because the United States is developing MD while Russia does not possess the resources to expand its offensive forces, Russian leaders likely fear the long-term potential for MD to degrade their strategic deterrent. Lastly, Russia's declining economic and military strength has led to a greater reliance upon nuclear weapons for defense (because nuclear forces are less expensive to maintain than conventional forces), and has arguably left nuclear might as Russia's sole claim to superpower status. In this context, MD poses a direct challenge to Russia's security strategy and prestige.

³⁰ George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," Fort Lesley J. McNair, Washington, D.C., 1 May 2001 http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html.

A common thread appears to link the issues outlined above. It is that Russian leaders' concerns over MD are tied to their increasing sense of vulnerability and diminished international standing. These concerns are in turn inextricably linked to Russia's economic hardships. This interpretation helps identify means to minimize the potential for Russia to respond to MD through arms competition. The chapter concludes with an analysis of U.S. policy options in this regard.

A. INCENTIVES FOR ARMS COMPETITION

1. Perceptions of Aggression and the Spiral Model

"NMD is about American strategic hegemony in the world," stated Alexei Pushkov of the Presidential Foreign Policy Council in Moscow. "Even if I am wrong, this is how it is perceived all over the world, and perceptions here [in Russia] are much more important than reality." Russian leaders' assertions that U.S. MD plans derive from aggressive intentions have become a common theme in the current debate. Equally common are U.S. declarations that American intentions are benign and that Russia is merely posturing. For instance, Rep. Curt Weldon (R-PA) has stated he is convinced that Russia's leaders "can and will understand that America's intent on missile defense is not to create an arms race. The Russians believe in missile defense because they know the threats [posed by rogue states] are real."

The spiral model would suggest that such extreme differences in images of the other side could form the necessary conditions for arms competition. There are two important questions to ask in assessing the spiral model's applicability to U.S.-Russian relations regarding MD. First, what is the basis for Russian beliefs that the United States harbors aggressive intentions? Second, to what extent does the character and language of the current MD debate encourage spiral type behavior?

To address the first question one may look to two basic trends of the post-Cold War era that might have contributed to Russian perceptions of strategic vulnerability and U.S. hegemonic objectives. The first trend has been a loss of Russian economic and

³¹ Pushkov quoted in Scott Peterson, "Moscow's Offense Against US Missile Defense," *The Christian Science Monitor*, 14 March 2001.

³² Curt Weldon, "Defense of America's Homeland," address to the House of Representatives, *Federation of American Scientists Homepage*, 02 May 2001, 05 September 2001 http://fas.org/news/usa/2001/usa-010502a.htm>.

military capability. The second trend, likely working to amplify the impact of the first, has been an increase (from the Russian perspective) in U.S. unilateralism and disregard for Russian security concerns. These two trends have arguably helped generate a growing tension amongst Russian elites between (a) desires to counter U.S. activities, and (b) an increasing inability to do so due to fiscal realities.

In the early 1990s, Russian leaders had reason to believe that they could maintain a somewhat equal political and strategic partnership with the United States. There had been significant progress in arms control (e.g., the 1990 Conventional Armed Forces in Europe Treaty (CFE), the 1991 START I agreement, and the 1993 START II agreement), which helped limit fiscal pressures on Russian leaders by allowing for the possibility of needed force reductions. Also, Russian concerns over the possibility of NATO expansion appeared to be addressed by the Partnership for Peace program, which—at least at the beginning in 1993-1994—seemed to indicate that NATO would not be taking in new members in the near term.

Moreover, in the area of MD, there was a brief period of convergence between United States and Russian policies in the early 1990s. As Stephen Hadley has pointed out, in January 1991 President George H.W. Bush's Administration shifted the focus of MD from the expansive aims embodied in President Reagan's Strategic Defense Initiative (SDI) to a somewhat more limited capability to address "third-country attacks and also...accidental or unauthorized launch from a nuclear power"—the so-called Global Protection Against Limited Strikes (GPALS) system. The lessons of the 1990-1991 Gulf War with regard to the emerging ballistic missile threat, combined with the August 1991 attempted coup in the Soviet Union (which highlighted the potential instability of control over Russia's nuclear arsenal), were probably factors in the formulation of these U.S. MD initiatives. Significantly, in January 1992, President Boris Yeltsin announced at the United Nations that Russia was willing to jointly develop, create and operate a global system of defense against ballistic missiles, a concept Moscow and Washington later termed a Global Protection System (GPS). GPS was envisioned as including early-

warning data sharing, coordinated missile defense operations, and technical cooperation.³³ In June 1992, Presidents Bush and Yeltsin approved a joint declaration:

The two Presidents agree that their two nations should work together with allies and other interested states in developing a concept for such a system [GPS] as part of an overall strategy regarding the proliferation of ballistic missiles and weapons of mass destruction.³⁴

However, this cooperation was short-lived. The Clinton Administration rapidly reversed course on Global Protection System negotiations and significantly scaled back funding for U.S. MD research programs in 1993. At the same time, the Administration withdrew treaty amendment proposals that might have opened the door for U.S. MD deployments. Furthermore, protocols were added to the ABM Treaty to include the newly independent states of Belarus, Kazakstan and Ukraine as parties. This was expected to make future ABM Treaty amendments more difficult.³⁵ Several joint U.S.-Russian declarations subsequently reaffirmed commitment to the ABM Treaty as a "cornerstone of strategic stability."³⁶ In short, much of the political groundwork that had been laid for Russian acceptance of a U.S. MD system during the Bush Administration was discarded by the Clinton Administration, which had different priorities, particularly in the period from January 1993 to January 1999.

Russia has encountered severe economic decline since 1991. One effect of this decline has been a reduction in military strength. An indication of the degree of hardship suffered is that by 1997 over two million people in the Russian armed services and defense industry had to share a combined annual budget equivalent to approximately one-fourth the funding of the United States Army.³⁷ That same year, Igor Rodionov, then the

³³ Stephen Hadley, "Global Protection System: Concept and Progress," *Comparative Strategy*, vol. 12 (January-March 1993) 3-5.

³⁴ "Joint United States-Russian Statement on a Global Protection System," 17 June 1992, *Public Papers of the Presidents of the United States* (1992-93), Book I (Washington, D.C.: Government Printing Office, 1993) http://www.bushlibrary.tamu.edu/papers/1992/92061703.html>.

³⁵ "Joint Communiqué on the Signing of the ABM Treaty Documents," released by the Office of the Spokesman, U.S. Department of State, 26 September 1997, 05 September 2001 http://www.state.gov/www/global/arms/970926 abm jtcomm.html>.

³⁶ "Joint Statement by the Presidents of the United States of America and the Russian Federation on Principles of Strategic Stability," released by the Office of the Press Secretary, the White House, 4 June 2000.

³⁷ Vitaly V. Shlykov, *The Crisis in the Russian Economy* (Carlisle Barracks, Pennsylvania: Strategic Studies Institute, 1997) iii.

Russian Minister of Defense, publicly declared that Russia's protracted economic crisis threatened to reduce the armed forces to nothing by 2003, and that even the strategic nuclear forces were in a state of near-total collapse.³⁸ Although such statements may have been cast in dramatic terms to gain political support in defense budget battles, they highlight the impression that military weakness was becoming a serious concern of Russian elites. Such concerns undoubtedly played a significant role in fostering a growing sense of Russian vulnerability in the political and strategic environment.

Events in the 1990s highlighted growing Russian weaknesses and began to call U.S. intentions into question in Russian eyes. Russian leaders' assessments of NATO decisions influenced by the United States have arguably played a major role in shaping Russian national policy and views of U.S. actions.

As early as 1994, indications that the United States would move ahead with NATO expansion began to emerge. President Clinton stated at a news conference with central European leaders in Prague in January 1994 that, "While the Partnership [for Peace] is not NATO membership, neither is it a permanent holding room. It changes the entire NATO dialog so that now the question is no longer whether NATO will take on new members, but when and how."³⁹

The impact of America's decision to move ahead with NATO enlargement was apparent in President Boris Yeltsin's comments at a 1994 Conference on Security and Cooperation in Europe summit. In response to statements by President Clinton that "no country outside [NATO] will be allowed to veto expansion," President Yeltsin declared that "Europe, even before it has managed to shrug off the legacy of the Cold War, is risking encumbering itself with a cold peace." More recently, President Putin expressed the Russian view of enlargement as follows:

The problem should be simple. In the West, everyone says 'We don't want new divisions in Europe, we don't want new Berlin walls.' Good. We completely agree. But when NATO enlarges, division doesn't disappear, it simply moves towards our borders. NATO should be

³⁸ Chikahito Harada, Russia and North-east Asia (New York: Oxford University Press, 1997) 18.

³⁹ Clinton quoted in James M. Goldgeier, *Not Whether But When: The U.S. Decision to Enlarge NATO* (Washington, D.C.: Brookings Institute Press, 1999) 57.

⁴⁰ Yeltsin quoted in ibid., 88.

disbanded as was the Warsaw Pact, but that is not even taken into consideration.⁴¹

To the extent that the eastward migration of NATO's frontiers is removing the buffer between Russian territory and that of the Western allies, many Russians see NATO enlargement as a potential threat to Russian security. Beyond enlargement, however, Russians have argued that the character of NATO's mission has changed in fundamental ways that directly reinforce U.S. hegemony. Specifically, the United States-led NATO operation in the Kosovo conflict in March-June 1999 was a defining moment for Russian perceptions of a growing U.S. threat.

Celeste Wallander of the Center for Strategic and International Studies has suggested that, although Russian leaders were uneasy about the implications of NATO enlargement in the 1990s, there was an underlying acceptance of the fact because Russian leaders "believed that the United States and NATO had committed themselves to adopting non-collective defense missions only with a United Nations mandate." In other words, Russian leaders' concerns were partially alleviated by an assumption that Russia yet held a veto over NATO's non-Article 5 activities through its seat on the UN Security Council. That the campaign proceeded without the benefit of a UN Security Council mandate undoubtedly fueled Russian fears of growing U.S. assertiveness.

Russian diplomatic reactions to the campaign were complex, shifting from initial strong opposition to NATO's operation to a more pragmatic slant of accommodation. A Chinese analysis of this change in policy stated, "On the one hand the government adopted a series of hardline postures in order to stabilize Russian feelings, and at the same time it considered that Russia lacked the economic strength to take part in any large-scale military action [to oppose NATO's actions]." The analysis argued that two U.S. actions key in Russia's eventual cooperation with NATO were: (a) U.S. efforts to encourage Russian participation provided some acknowledgement of Russia's major power status; and (b) the United States linked economic aid to Russia with Russia's

⁴¹ Putin quoted in Dana Lewis, "China, Russia sign friendship treaty," *MSNBC Staff and Wire Reports*, 16 July 2001, 17 July 2001 ">http://www.msnb

⁴² Celeste A. Wallander, "Russian National Security Policy in 2000," *Program on New Approaches to Russian Security Policy Memo Series*, Harvard University, January 2000, 22 August 2001 http://www.fas.harvard.edu/~ponars/POLICY%20MEMOS/Wallander102.html>.

policy towards the Kosovo campaign.⁴³ From this perspective, given little say in NATO's decision to intervene in the Kosovo conflict, Russian leaders' cooperation represented an attempt to salvage what they could from an uncomfortable situation. The road to compromise in this example may well have implications for potential U.S.-Russian compromise over MD.

Regardless of Russia's eventual uneasy compromise with NATO, the Russian experience in Kosovo clearly had an adverse effect on the attitudes of Russian leaders towards U.S. policies. Operation Allied Force indicated that Russia's seat on the UN Security Council no longer assured it a leading role in issues of strategic import. Also, NATO's Kosovo intervention helped to validate Russian suspicions that U.S. leaders no longer valued Russia as a major force in world politics. The humanitarian justification for the intervention probably conjured fears, however unrealistic, of U.S. intervention in Russian affairs (e.g., in Chechnya). Most importantly, Kosovo demonstrated a willingness by the United States (in the Russian view) to be unconstrained by international law and to act unilaterally in opposition to Russian interests. In short, the Kosovo "lessons" helped reinforce Russian views that U.S. intentions towards Russia were not benign. Alexei Arbatov, Deputy Chairman of the Russian Duma's Defense Committee, summed up the new Russian perspective as follows:

Now, everything has changed...After the war in the Balkans, there was no more talk of detargetting [the United States]. The Duma and the executive branch drafted a law for long-term allocations for the strategic forces...Moscow now regards NATO as an opponent if not an enemy.⁴⁴

Practical indicators of the seriousness with which the Russians considered the "lessons" of Kosovo can be seen in two ways. First, there were distinctive changes in 2000 to Russia's foreign policy objectives as declared in *The Foreign Policy Concept of the Russian Federation* that directly reflect Russian angst over U.S. policies.

There is a growing trend towards the establishment of a unipolar structure of the world with the economic and power domination of the United

⁴³ Lin Guiling, "Russia Readjusts Strategy in Face of Reality," *Renmin Ribao*, 2 July 1999. Translated by the Foreign Broadcast Information Service, entitled "Renmin Ribao Views Russian Strategy Change," 3 July 1999 (FBIS-FTS199990703000212).

⁴⁴ Arbatov quoted in "Russia launches drive to upgrade its strategic nuclear weapons," *Special to the World Tribune.COM*, 8 April 2000 http://www.worldtribune.com/...ive-2000/eu-russia-04-07.html.

States...Russia shall seek to achieve a multi-polar system of international relations that really reflects the diversity of the modern world...Attempts to introduce into the international parlance such concepts as "humanitarian intervention" and "limited sovereignty" in order to justify unilateral power actions bypassing the UN Security Council are not acceptable.⁴⁵

Second, the Russian national security concept in January 2000 explicitly included an expanded potential for nuclear weapons use, from repelling threats against "the very existence of the Russian Federation," to "repelling an armed aggression...if all other measures of resolving the crisis have been exhausted." The new approach was clearly played out in military exercises conducted in the summer of 1999. For instance, the Zapad-99 exercise simulated an attack on Russia's Kaliningrad Oblast by NATO forces. In the event, Russian conventional forces were assessed as unable to resist NATO. The NATO attack was ultimately repelled by use of limited nuclear Air Launched Cruise Missile (ALCM) strikes against European and U.S. targets. According to the exercise conclusions, the damage caused by these attacks, combined with the demonstrated willingness of Russia to expand the conflict, deterred further NATO advances. Apart from the significance of such exercises in indicating increased Russian security concerns vis-à-vis NATO and the United States, the exercise also indicated a greater reliance on nuclear weapons in Russian military thought.

The reemergence of MD as a major objective of U.S. policy in January 1999, therefore, may have seemed particularly alarming to Russian leaders, given the foundation of strategic insecurity and distrust of U.S. intentions that had developed over the past decade. John D. Holum, Senior Advisor for Arms Control and International Security during the Clinton Administration, acknowledged this point in a March 2000 address at Stanford University:

We [Americans] tend not to understand that countries—Russia and China, in particular—tend to look at NMD in a larger context; they connect the

⁴⁵ *The Foreign Policy Concept of the Russian Federation*, approved by Vladimir Putin on 28 June 2000, 22 August 2001 http://www.mid.ru/mid/eng/econcept.htm.

⁴⁶2000 Russian National Security Concept, approved by Vladimir Putin on 10 January 2000, 27 August 2001 http://www3.itu.int/MISSIONS/Russia/russiastrat2000.htm>.

⁴⁷Nikolai Sokov, "Overview: An Assessment of the Draft Russian Military Doctrine," *Center for Nonproliferation Studies Reports*, October 1999, 22 August 2001 http://cns.miis.edu/pubs/reports/sokov.htm.

dots. Thus, it's not totally surprising that the Russians see a more threatening environment when they link, for example, NMD with NATO expansion; intervention in Kosovo without United Nations imprimatur; and a general decline in the Russian military power.⁴⁸

These various issues are probably linked in the minds of Russian leaders, and jointly create a foundation for Russian perceptions of U.S. aggressive intent regarding MD.

How might the current MD debate be exacerbating Russian perceptions of a U.S. threat? The pattern of U.S.-Russian MD discourse has gone through complex twists and turns since January 1999—from diplomatic confrontation to stalemate and more recent glimmerings of potential compromise. However, a few recurring themes stand out that are strongly reminiscent of the language of the spiral model. The first issue relates to perceptions of U.S. intentions. The Bush Administration has stated:

The principal threat today is no longer a disarming first-strike like we thought about in the Cold War, but rather the use of long-range missiles by rogue states for the purposes of terror, coercion and aggression...we have said all along that we seek missile defenses to deal with the threat of blackmail and terror by rogue states.⁴⁹

Yet, the majority of Russian declarations have indicated a basic disagreement with the American threat assessment. In discussing President Putin's July 2000 diplomatic visit to Pyongyang, Russian Foreign Minister Igor Ivanov firmly rejected U.S. claims that the threat of "rogue states" was sufficient to warrant construction of a U.S. MD. Referring to North Korea, he said, "We proceed from the view that currently there is no threat." Exploitation of the arguments advanced by prominent Americans has become common in this regard. Vladimir Orlov of the PIR center (an independent Russian think-tank) has cited former Senator Sam Nunn and others as saying that the direct threat to U.S. security is clearly the danger of Russian missiles and not that of "rogue states." Furthermore, Orlov has declared, it is "practically impossible for North

⁴⁸ John D. Holum, address, Conference on International Reactions to U.S. National and Theater Missile Defense Deployments, Stanford University, Palo Alto, California, 3 March 2000, *U.S. Department of State Homepage*, 4 August 2001 http://usinfo.state.gov/topical/pol/arms/stories/holstanf.htm.

^{49 &}quot;Administration Missile Defense Papers," White House cable, 11 July 2001. *Carnegie Endowment for International Peace Homepage*, 26 July 2001 http://www.ceip.org/files/projects/npp/resources/EmbassyCableMD.html>.

⁵⁰ Ivanov quoted in Jim Heintz, "Putin Won't Pressure North Korea," *The Associated Press*, 11 June 2000.

Korea to launch missiles against the United States because the survival of the regime is the most important thing for North Korea."51

Related to this issue of U.S. intent are Russian assertions that the United States has ignored Russian security concerns and is determined to act unilaterally. This is perhaps the subtlest perceptual issue, but it may play a significant role in driving Russian fears of U.S. hegemonic behavior. One example of these views may be seen in Russian news coverage of Secretary of Defense Donald Rumsfeld's actions at the February 2001 European defense conference in Munich. Secretary Rumsfeld declared that:

the United States intends to develop and deploy a missile defense designed to defend our people and forces against a limited ballistic missile attack...These systems will be a threat to no one. They should be of concern to no one, save those who would threaten others.⁵²

Secretary Rumsfeld immediately left the forum after his comments without waiting to hear the views of the Russian delegation. Such behavior encouraged a Russian view that "the White House will not care about Russia's position."⁵³ When Russians perceive the United States as acting unilaterally, their belief in U.S. hegemonism is reinforced and their negotiating stance likely hardens against compromise.

Because the Russians have generally not viewed the threat in the same light as U.S. leaders, there has been a tendency for Russian (and Chinese) elites to conclude that the "true" objectives behind U.S. MD must be more expansive. Pavel Felgenhauer, a military analyst in Moscow, stated, "There is no military threat [referring to "rogue states"] so Russian Generals are suspicious...They are asking: 'Why is the U.S. spending so much money on this? They must be up to some kind of mischief, like a decision to undermine Russia's nuclear deterrent."⁵⁴ This first theme describes one perceptual

⁵¹"Press Conference with Vladimir Orlov, Yuri Fyodorov and Dmitry Yevstafyev, PIR Center Officials, on RF-US Agenda," *Federal News Service, Inc.*, official Kremlin International News Broadcast, 14 June 2001.

⁵² Donald H. Rumsfeld, remarks, Munich Conference on European Security Policy, 3 February 2001, *U.S. Department of Defense Homepage*, 4 August 2001 http://www.defenselink.mil/speeches/2001/s20010203-secdef.html>.

⁵³ Andrei Piontkovsky and Vitaly Tsigichko, "Tango with Russia," *Defense and Security*, 16 February 2001.

⁵⁴ Felgenhauer quoted in Scott Peterson, "Moscow's Offense Against US Missile Defense," *The Christian Science Monitor*, 14 March 2001.

element of the spiral model—that is, perceptions of aggressive intent. In this context Russian leaders may believe that U.S. MD is aimed at degrading their capabilities. As discussed above, this perception may be bolstered by the preexisting image Russian leaders have developed of U.S. actions over the last decade, notably with regard to NATO

A second theme relates to the threat of MD to U.S.-Russian strategic stability. There has been extensive debate over the impact of MD on Russia's nuclear capabilities. U.S. assessments generally tend to discount the possibility that any type of MD system could negate Russia's nuclear deterrent in the foreseeable future, whereas Russian assessments have tended to be far more alarmist. Several Russian analysts, for instance, have suggested that the combination of NATO enlargement, U.S. dominance in submarine warfare, and U.S. MD will make Russia vulnerable to a U.S. nuclear first-strike.⁵⁵

U.S. and Russian leaders have disagreed regarding the potential impact of U.S. MD on international stability in general. President Bush has stated, "We need new concepts of deterrence that rely on both offensive and defensive forces...Defenses can strengthen deterrence by reducing the incentive for proliferation."⁵⁶ In contrast, Russian leaders have repeatedly asserted that U.S. MD will destabilize the international environment and promote arms competition and proliferation. A joint Sino-Russian communiqué submitted in the UN Conference on Disarmament stated:

The two sides consider that the undermining or violation of the ABM Treaty would lead to a series of negative consequences: the emergence of new factors which could destabilize the international situation both at the global and the regional level, and of conditions for the resumption of an arms race and for the creation of additional obstacles to the process of disarmament.⁵⁷

⁵⁵ Alexander A. Pikayev, "Moscow's Matrix," *The Washington Quarterly*, vol. 23, no. 3 (Summer 2000): 187.

⁵⁶ George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," Fort Lesley J. McNair, Washington, D.C., 1 May 2001 http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html>.

⁵⁷ Vasily S. Sodorov and Wang Xiaoyu, "Russian-Chinese Press Communiqué on Consultations on Issues Related to the ABM Treaty," UN Conference on Disarmament, Document CD/1584, 28 April 1999, 16 October 2000 http://www.unog.ch/disarm/curdoc/1584.htm>.

Such perceptions that MD will decrease Russian security form a second critical element of spiral model behavior. That is, one state's actions to increase its own security are perceived by other states as decreasing their security.

A third theme relates to simple lack of clarity in U.S. and Russian policies on MD. Both U.S. and Russian leaders have consistently claimed that the other side's position is unclear. For example, Russian Foreign Minister Igor Ivanov told reporters in July 2001 that he was unable to "say anything definite" about where things stood between the United States and Russia on MD. "Some [American leaders] say they are withdrawing from the treaty. Others say they are not withdrawing...there is no point in reacting to such very contradictory statements." U.S. leaders have observed a similar lack of clarity on Russia's part as well. One unnamed Clinton Administration official told the *New York Times* in June 2000, "Putin says 'yes' when he means 'no'. He says I agree with you and then elaborates. And after you examine this elaboration you discover there is almost no agreement there." 59

This apparent lack of effective communication in the United States-Russian MD discourse could have two potential effects. First, it could significantly hinder the consultation process. More importantly, it could foster confusion and distrust. This latter factor could increase the potential for perceptual distortions of the other side's actions and intentions. These observations should be qualified, however, in view of the fact that public statements inevitably have a "public diplomacy" dimension and do not, by definition, reveal classified assessments.

A final aspect of the Russian opposition to MD has been a Russian tendency to employ threats of escalated "arms race" activity. In July 2000, for example, General Vladimir Yakovlev (then the Commander, Russian Strategic Rocket Forces) declared that Russia would respond to U.S. MD by abandoning the Intermediate-Range Nuclear Forces (INF) Treaty—thus allowing deployment of missiles designed to hold U.S. allies in

⁵⁸ Igor Ivanov quoted in Patrick Tyler, "'Contradictory' U.S. Words on ABM Issue Puzzle Russia," *The New York Times*, 14 July 2001, 16 July 2001 http://www.nytimes.com/2001/07/14/international/14RUSS.html>.

⁵⁹ Michael Gordon, "Putin Seeks Allies in Quest to Fight U.S. Missile Plan," *The New York Times*, 10 June 2000.

Europe and Asia hostage as a deterrent against U.S. aims.⁶⁰ A less direct example may include President Putin's announcement in March 2001 that Russia had agreed to resume arms and technology sales to Iran. This announcement may help to fuel MD opponents' concerns that U.S. MD will encourage greater arms proliferation.⁶¹ The nature of Russian threats may be intentionally aimed at playing to the worst fears of MD opponents in Western societies. However, they may also be sincere indicators of the degree to which Russians see U.S. MD as threatening. The public expression of strong views suggests an increased likelihood for misunderstandings, heightened feelings of threat and distorted perceptions of the other's intentions.

Several elements of the current U.S.-Russian MD debate are suggestive of the dynamics of the spiral model. The growing tension between Russian leaders' desires to counter U.S. MD activities and their increasing inability to do so may have established conditions for Russian leaders to see MD as a threat to their national security. The language of the debate supports the notion that Russians believe U.S. MD is aimed at eroding their security, and that the United States seeks goals with MD beyond addressing the "rogue state" threat.

However, considerations beyond perceptions of aggressive intent are also playing a significant role in Russian opposition to U.S. MD. A recent flurry of U.S.-Russian diplomatic exchanges has appeared to open the door for compromise on MD. The breakthrough appeared to occur during discussions at the G8 conference in Genoa, Italy, in which Presidents Bush and Putin agreed that any U.S. MD would be linked with talks on offensive nuclear arms cuts. President Putin stated:

As far as the ABM Treaty and the issues of offensive arms...we've [Bush and Putin] come to the conclusion that the two of these issues have to be discussed as a set...Neither one, nor the other side should feel it is somehow threatened or constrained...we have to maintain a balance.⁶²

⁶⁰ Simon Saradzhyan, "U.S. MD Effort Fueling Russia's New Missile Plan," *Defense News*, 10 July 2000.

⁶¹ Scott Peterson, "Moscow's Offense Against US Missile Defense," *The Christian Science Monitor*, 14 March 2001.

^{62 &}quot;Transcript of a July 22 Press Conference by President Bush and President Putin," *U.S. Newswire Inc.*, released by the Office of the Press Secretary, 22 July 2001.

Shortly after the conference President Putin seemed to suggest for the first time that compromise over ABM Treaty modification might be acceptable.⁶³

The significance of "balance" as a determining factor in Russia's willingness to compromise on MD needs to be investigated further to better assess possible incentives fueling Russian opposition to U.S. MD. The strong link between offensive and defensive systems in the current rapprochement suggests that Russia may be concerned with the sustainability of its nuclear deterrent. In this context, the thesis now turns to an assessment of the potential impact of MD on U.S.-Russian crisis stability.

2. Crisis Stability

A recurring theme of Russian leaders' arguments against U.S. MD, as previously discussed, has been that MD poses a threat to U.S.-Russian strategic stability. The key Russian concern in this context has been that U.S. MD might degrade Russia's nuclear deterrent against the United States. From the Russian perspective such an eventuality might allow the United States greater freedom of maneuver in pursuing policies opposed to Russian security interests. In the worst case, applying Cold War thinking, the Russians might imagine that the shift in the offense-defense balance could generate U.S. first-strike incentives, as discussed in Chapter II. To the extent that U.S. MD is perceived as negating the Russian deterrent, strong Russian incentives to engage in "arms race" activity could be created as U.S. MD is deployed.

The obvious question, of course, is what the impact of U.S. MD on the Russian nuclear deterrent might be. The issue is not amenable to a straightforward answer for several reasons. First, the extent—in terms of numbers and types of interceptors—of the Bush Administration's plan for MD deployment is not a matter of public record, and has probably not been entirely formulated yet. As described in the Introduction, a range of MD options (i.e., threshold "capability 1", expanded "capability 1" and "capability 3") are herein considered to provide a basis for analysis.⁶⁴

Second, there is wide disagreement over MD's technical feasibility. This is mainly because the systems in question are still in development. Estimating, for

⁶³ David Sanger, "Bush and Putin Tie Antimissile Talks to Big Arm Cuts," *The New York Times*, 23 July 2001.

⁶⁴ See Appendix A for details on MD capability levels.

example, the probable kill ratio of MD interceptors to Russian missiles is difficult. Statements made by Under Secretary of Defense for Acquisition and Technology Jacques Gansler in June 2000 suggest that the Ballistic Missile Defense Office then planned to allocate more than one interceptor per incoming ballistic missile warhead in order to achieve an acceptable probability of target destruction.⁶⁵ If one grants each interceptor an 80 percent chance of destroying the target—an optimistic value given the MD test program results thus far—then four shots per inbound missile would be necessary to ensure a kill probability approaching 100 percent.

This four to one formulation does not take into account many complicating variables—countermeasures, for example—that would affect the basic assumption of 80 percent interceptor hit probability. Despite the risk of oversimplification, however, this four to one formulation should suffice in demonstrating the likely worst-case effectiveness (from a Russian perspective) of U.S. MD against Russian missiles.

Lastly, the state of Russian strategic forces is a matter of significant debate. Severe economic constraints and aging are driving the numbers and operational readiness of Russia's strategic forces down. Total START-accountable Russian warheads deployed on strategic forces—intercontinental ballistic missiles (ICBMs), submarine launched ballistic missiles (SLBMs) and air-launched bombs/missiles—in June 2001 were estimated at 5,600.66 Depending on the operational status of Russia's nuclear forces and early-warning networks, Congressional Budget Office analysts have forecast that a massive U.S. surprise first-strike could reduce Russian strategic forces available for a retaliatory strike to between 8 and 42 percent.67 Utilizing the remarkably extreme assumptions of the lower end survivability of 8 percent, however, even a C3 MD system could pose little threat to Russia's deterrent today. In that instance, over 380 ICBM warheads would be able to penetrate U.S. MD to strike U.S. targets. Clearly, this would be sufficient to produce unacceptable damage to U.S. society. As a metric of the damage

⁶⁵ See among other sources "Lieutenant General Ronald Kadish Holds News Briefing on NMD," *Federal Document Clearing House, Inc. Political Transcripts*, a Defense Department regular news briefing, 20 June 2000; and Frank P. Harvey, "The international politics of national missile defense: a response to the critics," *International Journal*, vol. 55 (4) (September 2000) 545-566.

⁶⁶ NRDC, "Nuclear Notebook," *Bulletin of the Atomic Scientists*, vol. 57, no.3 (May/June 2001): 78-79.

⁶⁷The START Treaty and Beyond (Washington, D.C.: Congressional Budget Office, 1991) 87.

such a force might inflict, some weapon-effects studies have concluded that detonating as "few" as 200 warheads over key U.S. economic targets would be sufficient to induce "mass starvation and economic collapse."⁶⁸

At issue, however, is the impact of U.S. MD on stability over time as Russia's nuclear arsenal diminishes. Most Russian and U.S. analysts concur that for economic reasons Russia's nuclear forces will significantly decline in the near term. Some extreme estimates predict levels as low as 500 warheads by 2010.⁶⁹ The consensus, however, appears to expect between 1,000 and 1,500 warheads by 2010. The Monterey Institute of International Studies and Carnegie Endowment for International Peace 2001 *Nuclear Status Report* provides detailed forecasts of Russian nuclear force levels for 2007 (the START II completion date) and 2010. The forecasts are based upon a wide range of data from various government and non-government sources that take into account Russian force obsolescence and acquisition planning.⁷⁰ Under START II provisions, this source estimates that Russia will have 1,678 operational warheads in 2007 and 1,086 operational warheads in 2010.⁷¹ Utilizing this trend data in conjunction with the assumptions outlined above regarding MD effectiveness and hypothetical U.S. first-strike results, some basic calculations can be made to estimate the impact of various levels of U.S. MD on the Russian strategic nuclear deterrent.

The threshold C1 MD deployment is assessed to be highly unlikely to negate Russia's nuclear deterrent. In the worst case, Russian forces available to retaliate following a U.S. nuclear attack in 2010 would be 87 warheads. Of this amount, approximately 82 warheads would penetrate U.S. defenses.

The Clinton Administration's expanded C1 MD system would have a similar impact on Russian capabilities as the threshold C1 system in 2010, allowing slightly

⁶⁸ M. Anjali Sastry and Joseph J. Romm, and Kosta Tsipis, "Can the U.S. Economy Survive a Few Nuclear Weapons?," *Technology Review*, 92 (April 1989): 24, 28.

⁶⁹ Bruce Blair, "Impact of NMD on Russia, Nuclear Security," *Center for Defense Information*, 9 July 2001 http://www.cdi.org/hotspots/issuebrief/ch6/index.html>.

⁷⁰ See among other works Dean Wilkening, "The Evolution of Russia's Strategic Nuclear Forces," July 1998, 15 July 2001 <cisac.stanford.edu/docs/russianforces.pdf>; and Joshua Handler, "Russia's Nuclear Strategic Forces in 2008-2013," *New Challenges in the Spread of Weapons of Mass Destruction* (conference, September 23-26, 1999).

⁷¹ Jon Brook Wolfsthal et al., eds., *Nuclear Status Report*, no.6 (Washington, D.C.: Carnegie Endowment for Intl. Peace; Monterey, CA: Monterey Inst. of Intl. Studies, 2001) 35.

fewer than 70 warheads to reach U.S. soil during a Russian counterattack. At C3 MD deployment levels, however, the potential impact on Russian deterrent capabilities becomes more significant. In that case, Russia could be left with a penetration capability of some 24 warheads in 2010. It should be noted, however, that this level would still be comparable to the level of strategic deterrent considered acceptable by nations such as China. The results are summarized in Table 1.

Table 1. Warheads Penetrating U.S. MD in a Russian Counterstrike as a Function of Russian Arsenal Size and Number of U.S. MD Interceptors

MD Interceptors (I)	2000 (5,600 warheads)	2007 (1,678 warheads)	2010 (1,086 warheads)
Threshold C1 (20 I)	443	130	82
Expanded C1 (100 I)	423	110	62
C3 (250 I)	385	72	24

Intuitively, even 24 warheads penetrating to strike U.S. soil seems more than sufficient to deter hypothetical U.S. aggression in times of crisis. However, there are potentially complicating issues to consider. As suggested in Chapter II, perceptual distortions and uncertainty may lead Russian leaders to exaggerate the expected effects of U.S. MD on crisis stability. There also may be a fear that once a baseline system is in place, the ability of U.S. leaders to expand MD capabilities will be significantly enhanced. In other words, the initial threshold C1, expanded C1 or C3 capabilities might provide the necessary "stepping stone" to a far more advanced and effective system. This notion of a U.S. "breakout" potential has been reflected in the declarations of several Russian leaders in the past. Moreover, U.S. planners have on occasion acknowledged the significant doubt that U.S. MD might create in the minds of Russian leaders. For example, a 1995 analysis prepared for Congress by the Pentagon's Ballistic Missile

Defense Office stated that MD "could augment deterrence by significantly increasing the Russian planners' doubts that any military attack on the United States could succeed."⁷² Considering the United States Joint Chiefs of Staff's May 2000 assessment that 2,000 U.S. warheads were required to meet U.S. security needs,⁷³ it is reasonable to assert Russian leaders would look at its own retaliatory capability falling below 100 with great concern.

Lastly, if Russian force levels do drop below 1,000 by 2010 as some analysts have projected (e.g., the previously mentioned 500 warhead estimate), even the very limited threshold C1 capability could have a major impact on the Russian capacity to respond to a U.S. attack. Estimates of Russian warheads reaching U.S. soil in that case would be 35, 15 and zero against the United States threshold C1, expanded C1 and C3 systems respectively. Under such conditions, the Russian strategic deterrent would clearly be in jeopardy.

In any discussion of such extreme hypothetical situations, it should be underscored that actual nuclear exchanges (a) would probably not conform to theoretical models, owing to reliability shortfalls and Clausewitzian "friction" factors, among other considerations; and (b) would involve massive fallout and other environmental damage deterring both Moscow and Washington from contemplating such actions.

At least for the coming decade this assessment suggests that it is unlikely that U.S. MD will negate Russia's nuclear deterrent, although under certain conditions there could be a significant impact. Furthermore, Russian leaders have begun to acknowledge this conclusion in their own public declarations, and have offered judgments extending well beyond the next decade. For example, President Putin announced to reporters in Slovenia in June 2001 that he believed that if U.S. MD were deployed, it "would not effectively counter Russia's huge nuclear arsenal for at least 25 years." If such

⁷² "National Missile Defense Options," Ballistic Missile Defense Organization, 31 July 1995 cited in Bruce Blair, "Impact of NMD on Russia, Nuclear Strategy," *Center for Defense Information Homepage*, 9 July 2001 http://www.cdi.org/hotspots/issuebrief/ch6/index.html>.

^{73 &}quot;Joint Chiefs Oppose Russian Plan to Cut 1,000 U.S. Warheads," *Washington Times*, 11 May 2000 http://www.washtimes.com/archives.htm>.

⁷⁴ Putin quoted in indirect discourse in David Sanger, "Bush and Putin Tie Antimissile Talks to Big Arm Cuts," *The New York Times*, 23 July 2001.

statements about MD, which incidentally represent a major reversal from previous Russian declarations, express sincere Russian assessments of U.S. MD's potential threat to strategic stability, crisis stability concerns are evidently not the sole driver of Russian opposition to U.S. MD plans.

Ultimately, crisis stability (defined narrowly, as simply a function of force posture characteristics) depends upon the judgments each side makes about the other's capabilities, and the assumptions underlying those judgments. For example, in Table 1 several worst-case conditions were considered to estimate the potential extent of U.S. MD's effect on Russia's deterrent. As this analysis suggests, in certain circumstances there could be a basis for Russian leaders' concerns. The opposing trends of decreasing Russian offensive capability and increasing U.S. MD capability could move the United States-Russian balance in the direction of instability at some point in the future unless: (a) U.S. offensive force levels were reduced in conjunction with defensive system deployments, or (b) Russian leaders countered U.S. MD deployments through defensive or offensive arms competition.

President Putin's positive reaction to President Bush's agreement in July 2001 to link offensive arms reduction talks with MD consultations, as previously noted, may in part reflect Russian desires to hedge against the possible continuation of this long-term trend towards crisis instability. Furthermore, insofar as Russia is able to encourage the United States to continue its movement towards lower numbers of offensive weapons, the uncertainties regarding MD's impact on the United States-Russian balance will be reduced, as will be the resources Russia requires to maintain the strategic balance.

3. Prestige

Much of Russia's approach to national defense has been inherited from the Soviet Union. There are three key factors of significance in this regard. First, in a country historically beset by economic hardship and social strife, military-industrial productivity and strong defense capabilities became key foundations of regime legitimacy. Martin Malia has argued that Soviet military performance in World War II "gave the regime [the Communist Party] an additional forty-five years of life, something its virtues as a system

alone probably would not have afforded it."⁷⁵ Military strength played a fundamental role in allowing the Soviet Union to occupy a position of political equality with the United States during the Cold War. It is likely that Russia's nuclear arsenal yet provides it a place at the international bargaining table out of proportion to its economic standing. The simple fact that the United States is exerting considerable effort to compromise with Russia over U.S. MD supports this judgment.

Second, the Soviet system was designed for war production. During the 1980s, for example, approximately 60 percent of machine building was devoted to the military-industrial complex. In the post-Cold War era, the process of "demilitarizing" the Russian economy has been a slow and painful one. The military-industrial complex, and in particular the Strategic Rocket Forces, still exert powerful influence over Russian decision-making. This probably explains why in the midst of a severe financial crisis, Russian leaders continue to devote scarce resources to nuclear modernization programs, research on "third-generation" nuclear weapons, and investments such as the ongoing effort to build large networks of underground tunnels and command and control facilities in the Ural Mountains (designed for over 60,000 occupants) for the purpose of shielding elites in the unlikely event of nuclear war.

Third, many of the political and military elites that were in power during the Soviet era are still in positions of power today. Even though the political system has changed dramatically since the dissolution of the Soviet Union, these elites likely retain many of the attitudes and practices they acquired under that regime with regard to strategic planning and the role of military power. Insofar as these leaders pursue old methods and yearn for the dominant political and military stature of Russia's recent past, Russia's present decline must be distressing. In short, the institutions, practices and

⁷⁵ Martin Malia, *The Soviet Tragedy: A History of Socialism in Russia. 1917-1991* (New York: The Free Press, 1994) 274.

⁷⁶ Sergey Rogov, *Russia: The Difficult Road to a Market Economy* (Alexandria, VA: Center for Naval Analyses, 1996) 9.

⁷⁷ Vitaly V. Shlykov, *The Crisis in the Russian Economy* (Carlisle Barracks, PA: Strategic Studies Institute, 1997) 16-17.

⁷⁸ Gwendolyn Hall, John Cappello and Stephen Lambert, *A Post-Cold War Nuclear Strategy Model* (USAF Academy: USAF Institute for National Security Studies, 1998) 34-35.

experiences carried over from the Soviet era undoubtedly help shape current Russian thought.

Today, the focus on military might in defining Russia's superpower status has likely become even greater. Russia's economic decline over the last decade has dramatically reduced its standing in the international market. The extent and pace of this decline may be partially revealed through three metrics. First, between 1992 and 1999 Russian GDP dropped more than 44 percent (a greater decrease than that of the American Great Depression). Second, over the last decade Russia's economic standing in the world went from second to well below tenth, with states such as Indonesia, Brazil and Mexico ahead in GDP. Lastly, and perhaps most telling, domestic scarcity and social ills have caused male life expectancy in Russia to fall below that in many Third World countries (from 70 years in 1989 to below 58 years by 1994). By most economic measures, Russia has become a secondary world power.

This economic decline has resulted in sweeping reductions of Russia's military forces. Having inherited over 85 percent of the Soviet Union's military potential (i.e., equipment, infrastructure and manpower) with less than 60 percent of its GDP, Russia possesses an enormous force structure it can ill afford.⁸¹ Consequently, virtually every branch of the military establishment has suffered severe cutbacks and budget shortfalls.

Events such as NATO's intervention in the Kosovo conflict in March-June 1999 (and the *Kursk* disaster in August 2000) have helped to exacerbate Russian awareness of growing vulnerability. It was likely in an effort to compensate for this reduction in conventional military strength that Russian policy was changed after Kosovo to reflect an increased emphasis on nuclear weapons (i.e., because nuclear weapons are seen as more cost-effective than conventional forces). The primary change, reflected in the 2000 Russian National Security Concept (NSC), has been to expand the conditions for nuclear weapons use from repelling an armed aggression "[that] creates a threat *to the very*

⁷⁹ Transition Report Update: Economic Transition in Central and Eastern Europe, the Baltic States, and the CIS (London: European Bank for Reconstruction and Development, 2000) 75.

⁸⁰ Sergey Rogov, *Russia: The Difficult Road to a Market Economy* (Alexandria, VA: Center for Naval Analyses, 1996) 30, 32.

⁸¹ Ibid., 45.

existence of the Russian Federation" to "if all other measures of resolving the crisis have been exhausted or proven ineffective."82

The 2000 NSC also reveals potentially important insights into Russia's view of its changing strategic environment related to concerns over its diminishing international standing. For example, the NSC cites "the danger of a weakening of Russia's political, economic and military influence in the world" as one of the fundamental threats to stability in the international sphere. The document also partially attributes Russia's weakening state to the efforts (as perceived by Russians) of other nations to further the country's decline:

A number of states are stepping up *efforts to weaken* Russia politically, economically, militarily and in other ways. *Attempts to ignore* Russia's interest when solving major issues of international relations...are capable of undermining international security, stability, and the positive changes achieved in international relations...Threats to the Russian Federation's national security in the international sphere can be seen as attempts by other states *to oppose a strengthening* of Russia as *one of the centres of a multi-polar world*.⁸³

The message that Russia sees itself as being ignored and diminished by other powers is certainly telling, and suggests how deep Russian concerns over loss of prestige may be. The thinly veiled references to America as the main foil in this regard are unmistakable. This same message has been repeatedly asserted in the context of U.S.-Russian relations. A striking illustration is Russian President Boris Yeltsin's December 1999 statement regarding U.S. criticism of Russia's actions in Chechnya: "It seems Mr. Clinton has forgotten Russia is a great power that possesses a nuclear arsenal. We aren't afraid at all of Clinton's anti-Russian plans." More recently, Alexei Pushkov, a member of Russia's Presidential Foreign Policy Council, stated with regard to U.S. MD plans, "It is unwise for the United States to think that Russia is a weak country

⁸² Nikolai Sokov, "Russia's New National Security Concept: The Nuclear Angle," *Center for Nonproliferation Studies Reports*, 22 August 2001 http://cns.miis.edu/pubs/reports/sokov2.htm; emphasis added.

^{83 2000} Russian National Security Concept, approved by Vladimir Putin on 10 January 2000, 27 August 2001 http://www3.itu.int/MISSIONS/Russia/russiastrat2000.htm; emphasis added.

⁸⁴ Yeltsin quoted in John Leicester, "Yeltsin Lashes Out at Clinton for criticizing the Chechen War," *The Associated Press*, 10 December 1999, 17 September 2001 http://www.amrillonet.com/stories/121099/usn LA0731.001.shtml>.

today...Russia can still use the fact that it has a very important nuclear potential as a bargaining factor."85

This theme of continuing Russian greatness through military power, with its origins in Russia's imperial past, can be seen today in the bellicosity of the Russian people. One measure of this tendency may be the surprisingly positive reaction of the Russian population to the second post-Soviet Chechen War, which began in late 1999. Many analysts judge that it was then-Prime Minister Putin's active role in supporting Russian forces in the Chechen War (in terms of pushing for resources and military freedom of action) that propelled him to Russia's leading position. His popularity rating has skyrocketed, in large part because of the war, from near zero to 58 percent in but a few years.⁸⁶

Interpreting this reaction to a conflict that is arguably (from a non-Russian view) further destroying the rule of law and morale in an already devastated military establishment is difficult. Anatol Lieven, a research fellow at the Carnegie Endowment for International Peace, has argued that there has been a distinctive lack of Russian nationalism in the 1990s, despite Western views to the contrary, due to an absence of institutions for mass mobilization and a history in which ethnic nationalism was suppressed by ideology.⁸⁷ If such an assessment is correct, then the strong support of the Russian people for military operations in Chechnya may reflect the emergence of a new nationalism. President Putin, however, has expressed an alternative explanation:

I had already decided that my career might be over, but that my mission, my historical mission—and this will sound lofty, but its true—consisted of resolving the situation in the Northern Caucasus...That is what I thought of the situation in August [1999]...I was convinced that if we didn't stop the extremists right away, we'd be facing a second Yugoslavia on the entire territory of the Russian Federation—the Yugoslavization of Russia...I have never for a second believed...that Chechnya would limit itself to its own independence. It would be a beachhead for further attacks on Russia...The entire Caucasus would have followed—Dagestan, Ingushetia,

⁸⁵Pushkov quoted in Scott Peterson, "Moscow's Offense Against US Missile Defense," *The Christian Science Monitor*, 14 March 2001.

⁸⁶ Ben Aris, "Military Finds Strength in Chechnya War," *San Diego Union-Tribune*, 24 November 1999.

⁸⁷ Anatol Lieven, "The Weakness of Russian Nationalism," *Survival*, vol. 41, no. 2 (Summer 1999) 53-55.

and then up along the Volga River to Bashkortostan and Tatarstan, reaching deep into the county...[T]he disintegration of such an enormous country would have been a global catastrophe.⁸⁸

In this view, then, Russian support for the war stems from powerful convictions about the implications of losing sovereignty over Chechnya.

Regardless of the origins of Russian bellicosity, it appears that many Russians see the forceful reassertion of Moscow's rule in Chechnya as a reaffirmation of Russian strength—a strength that cannot be demonstrated today in non-military spheres. When discussing the Chechen campaign with reporters in Moscow in February 2000, the Secretary of Russia's National Security Council, Sergei Ivanov, talked tough about Russia regaining its international stature. He stated that, "Under Mr. Putin Russia is reversing the trend of having lost its voice" and has shown that "we still know how to bite." 89

Ivanov's attitude is clearly shared by a large number of Russian citizens. A Russian public opinion survey conducted in 2000 showed that 49 percent of respondents agreed with the statement that "Russia must keep a big and powerful army, even if it does not have sufficient resources for that." This is a particularly significant finding in a nation where in 1999 over 34 percent of the population lived below the poverty level. To the extent that Russians yet equate regime strength and prestige with military strength, the implications for the MD debate may be severe.

Given the likelihood that Russia's sense of prestige is strongly related to its military and security status, it is apparent that under current conditions U.S. MD potentially strikes at the heart of Russian pride. As important measures of Russian international status have deteriorated (e.g., the economy and diplomatic influence),

⁸⁸ Vladimir Putin, with Nataliya Gevorkyan, Natalya Timakova, and Andrei Kolesnikov, *First Person: An Astonishingly Frank Self-Portrait by Russia's President*, translated by Catherine A. Fitzpatrick (New York: Public Affairs, 2000) 139-142.

⁸⁹ Ivanov quoted in Jane Perlez, "Russian Aide Opens Door a Bit to U.S. Bid for Missile Defense," *The New York Times*, 19 February 2000, late ed.: A3.

⁹⁰ Vitaly V. Shlykov, "Resource Allocation for the Military and Military Reform in Russia," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 6-7.

⁹¹ Russian Economic Trends, Monthly Update, 10 March 2000, Table 6: Social Indicators.

military strength has grown in relative importance. The focus of military strength has turned for fiscal reasons towards higher reliance on nuclear forces until economic recovery can be accomplished sufficiently to rebuild Russian conventional strength. This trend has been occurring at the same time that Russia is experiencing significant difficulty maintaining its existing nuclear arsenal. Because U.S. MD could in some circumstances further diminish this particular measure of Russian power, U.S. MD could directly threaten Russia's standing as a superpower and present a significant challenge to Russia's prestige.

With this general trend towards higher reliance on nuclear forces, a debate over priorities has been underway in the Russian military since 1997. The Chief of the General Staff, General Anatoly Kvashnin, has argued for major cutbacks in Russia's strategic nuclear forces to allow for conventional force modernization and continued reliance upon non-strategic nuclear forces (NSNF). Another camp, led by Marshal Igor Sergeyev, a former Defense Minister and current adviser to President Putin, has argued that the focus must be on strategic nuclear forces.⁹² This debate, as yet unconcluded, may have implications for potential Russian reactions to a U.S. MD deployment. For example, the existence of strong military constituencies desirous of strategic force reductions may: (a) increase pressure on Russian politicians to reach a compromise with the United States over MD; and (b) decrease the likelihood of a Russian strategic arms build-up following U.S. MD deployment.

The recent indications of impending compromise between Presidents Bush and Putin over MD may be a further reflection of the importance of prestige in the current debate. Several analysts have suggested that, regardless of whether an agreement is reached, simply by meeting with President Putin as an equal President Bush has helped to restore Russia's sense that it remains a major power in the world, despite its economic hardships, its loss of territory and its declining international influence.⁹³

⁹² David S. Yost, "Russia's Non-Strategic Nuclear Forces," *International Affairs*, vol. 77, no. 3 (July 2001) 532-533.

⁹³ David Sanger, "Bush and Putin Tie Antimissile Talks to Big Arm Cuts," *The New York Times*, 23 July 2001.

In addition to concerns over U.S. intentions and strategic stability, Russian prestige should be considered as a potential driver of arms competition following a U.S. MD deployment. Indeed, prestige concerns may in actuality be the key incentive driving Russian reactions because of the strong psychological and emotional connection between military strength and Russian identity. It is difficult to separate prestige from the other incentives considered thus far, however. For instance, it is likely that concerns over prestige help fuel perceptual distortions in Russia—e.g., that the United States has aggressive intentions and constitutes a threat. If the relevance of these three interrelated incentives is granted, the focus must turn to Russia's realistic capabilities for arms competition given its current state of economic and military decline.

B. ARMS RACE CAPABILITIES

The official Russian position has been that should the United States choose to unilaterally withdraw from the 1972 ABM Treaty, Russia would withdraw from other arms control treaties (e.g., START, INF and CFE). Additionally, Russian leaders have explicitly suggested a wide range of alternative force posture responses to counter U.S. MD. Examples include the retention of MIRVed SS-18 missiles, maintaining a launch on warning posture, the development of MD countermeasures, and the MIRVing of SS-27 ICBMs. 94 Other potential responses implied by the diplomatic actions of Russian leaders have included arms and technology transfers to other nations (in effect, promoting WMD proliferation) and the formation of anti-American alliances with other states (e.g., China). Regardless of Russian leaders' preferences over U.S. MD, however, Russia faces numerous practical constraints on its range of possible responses. Most of these constraints relate directly to the aforementioned economic hardships.

1. Economic Potential

Russia's financial predicament is profound and unlikely to change fundamentally in the near term for several reasons. Although the Russian economy has experienced occasional modest upswings due to the fluctuating world oil market (e.g., in 1997 and 1999), the basic problems underlying the Russian economic system have not been

⁹⁴ See among other sources Alexander Savelyev, "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001); Michael O'Hanlon, "Star Wars Strikes Back." *Foreign Affairs* November-December 1999: 71-72; or Alexander Nikitin, "Russian Disarmament Dilemmas," *Nuclear Weapons: The Road to Zero*, ed. Joseph Rotblat (Colorado: Westview Press, 1998) 274-276.

corrected. In other words, true economic reform has yet to occur in the post-Cold War years.

Three issues loom large in this regard. First, Russia's economic structure is still heavily militarized. For more than half a century the best materials, human resources and technologies went into defense-related industries. The defense-industrial base was the core of the Soviet economy. Today, the civilian economy is still merely an adjunct to the defense industry, which is itself an extremely inefficient and increasingly non-productive apparatus. Past efforts to bolster the waning defense industry through arms exports have not produced the anticipated returns. This is in large part due to an overall decrease in the world arms demand, compounded by Russia's loss of a substantial portion of the East European arms market in the mid-1990s. Recent arms sales to China may alter this picture slightly, but on balance are unlikely to reverse the economic decline to any significant degree. In any case, such sales only provide temporary windfalls (as do occasional rises in oil prices), and they do not provide a sustainable solution for Russia's economic problems.

Second, although the Soviet state was always corrupt, organized crime has been pervasive in post-Cold War Russia. For instance, some economists have estimated that between 22 and 50 percent of Russian GDP in the late 1990s was tied to the black market.⁹⁷ The lack of effective market regulations and the poor rule of law have resulted in the creation of a complex web of criminal alliances, clans and fiefdoms with a stake in discouraging reforms. This corruption heavily penetrates the defense sector. One two-year study of the Russian defense industry conducted by the Center for Strategic and International Studies concluded that, "Left unchecked Russia is in danger of becoming a 'criminal-syndicalist state' under the control of corrupt government bureaucrats,

⁹⁵ See, among other sources, Gwendolyn Hall, John Cappello and Stephen Lambert, *A Post-Cold War Nuclear Strategy Model* (USAF Academy: USAF Institute for National Security Studies, 1998) 28; and Vitaly V. Shlykov, *The Crisis in the Russian Economy* (Carlisle Barracks, PA: Strategic Studies Institute, 1997) 17.

⁹⁶ Sergey Rogov, *Russia: The Difficult Road to a Market Economy* (Alexandria, VA: Center for Naval Analyses, 1996) 35.

⁹⁷ Vitaly V. Shlykov, *The Crisis in the Russian Economy* (Carlisle Barracks, PA: Strategic Studies Institute, 1997) 3.

politicians, businessmen, and criminals."98 This high level of corruption not only makes true market reforms unlikely, but it also makes a coherent plan of any kind (e.g., defense buildup) difficult to pursue.

Lastly, many of the economic gains the Russian economy has enjoyed (e.g., the recent resurgence in oil prices) are being lost to capital flight. Much of this reflects the magnitude of corruption and organized crime in Russia. Disproportionate amounts of the nation's resource profits fall into the hands of a few privileged elites—the so-called "oligarchs." As with other nations heavily reliant on revenue from raw material exports (e.g., Venezuela), the economic elites are investing their profits abroad rather than in the less favorable domestic arena. In other words, the profits are not being utilized to improve Russian security and the country's domestic condition. The rate of such capital exports was a staggering U.S. \$1 billion a month in 1999.

The overall consequence of these various factors has been a severely weakened Russian economy with limited near-term prospects for a solid and enduring revival. According to the 1999 Global Competitiveness Report of the World Economic Forum in Switzerland, in an assessment of eight criteria of economic potential—i.e., openness to trade and investment, the role of the state, finance, infrastructure, technology, management, labor and institutions—Russia ranked last of the 59 nations examined.¹⁰⁰ William Odom summed up the state of Russian economic affairs in 1998 as follows:

Russia is afflicted with the post-colonial weak state syndrome so common throughout the Third World. This predicament is neither abnormal nor likely to be temporary; it can endure for decades...Russian economic prosperity...is highly improbable in the next decade or two...Certain institutions of government are imperative for effective economic performance...Russia neither has them nor shows any likelihood of creating them soon.¹⁰¹

⁹⁸ "Russian Organized Crime: A Report of the Global Organized Crime Task Force," a 1997 Center for Strategic and International Studies Panel Report quoted in Gwendolyn Hall, John Cappello and Stephen Lambert, *A Post-Cold War Nuclear Strategy Model* (USAF Academy: USAF Institute for National Security Studies, 1998) 30.

⁹⁹ Valery Virkunen, "Capital Flees Russia at a Rate of U.S. \$1 Billion a Month," *Prism*, vol. 5, no. 20 (17 December 1999), published by the Jamestown Foundation.

¹⁰⁰ Alan Friedman, "Singapore Is Ranked Most Competitive," *International Herald Tribune*, 14 July 1999, 11.

¹⁰¹ William E. Odom, "Russia's Several Seats at the Table," International Affairs, vol. 74 (October

2. Strategic Potential

Russia's potential to engage in arms competition with the United States seems low indeed, given the lack of a viable economic foundation to support such an objective. In the general military situation, several indicators bode poorly for any prospects of major buildups in conventional or strategic nuclear forces. To begin with, the government is not able to adequately compensate its service members in pay or benefits. In 1999, according to a Russian government study, 49.9 percent of Russian servicemen's families earned incomes below the subsistence level, as compared with 33 percent in the general population. Furthermore, according to Russian Labor Minister Alexander Pochinok, some 164,000 military retirees are waiting an average of 15 to 18 years for basic retirement housing benefits. 103

Financial hardships extend to new military equipment acquisition and the maintenance of legacy operational systems as well. At the end of the Soviet era, expenditures for new armaments, scientific research, and experimental design constituted approximately two-thirds of the defense budget. In 2001 some Russian budget experts assess that between 70 and 82 percent of the defense budget goes into simply maintaining (without upgrades) the existing force. Speaking of the Russian defense budget for 2001, Duma Defense Committee Chairman General Andrei Nikolaev told Russian news agencies that:

The purchases of arms for the general purpose forces will have a piecemeal character. The armed forces won't receive even a single aircraft, or a helicopter, or an anti-aircraft missile complex, not a single tank or an infantry combat vehicle...in 2001 the Russian Army won't get a single piece of new modern equipment. 105

^{1998) 814, 819.}

¹⁰²Vitaly V. Shlykov, "Resource Allocation for the Military and Military Reform in Russia," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 12.

¹⁰³ Ibid., 10-11.

¹⁰⁴ Sergey Rogov, *Russia: The Difficult Road to a Market Economy* (Alexandria, VA: Center for Naval Analyses, 1996) 45.

¹⁰⁵ Nikolaev quoted in Vitaly V. Shlykov, "Resource Allocation for the Military and Military Reform in Russia," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 15.

Furthermore, the mid-term plan for reforming the military—*The Plan for Building the Armed Forces in 2001-2010*—suggests that during the period of 2001-2008 expenditures will mainly be restricted to "repairs and step by step modernization of the existing equipment." In other words, at least in the near-term, there is no money for new acquisitions.

The picture for the strategic nuclear forces is much the same. Two major difficulties constrain the prospects for Russian leaders to pursue nuclear arms buildups in response to U.S. MD. First, the ongoing financial crisis has had a severe impact on the acquisition of new weapon systems. The only new strategic missile purchases since 1992 have been the SS-27 TOPOL-M ICBMs and the SS-N-23 SKIFF SLBMs. This significant reduction from the tremendous range of systems the Soviet Union possessed is not in itself a sign of weakening. In actuality, the earlier large variety of missiles was quite inefficient economically. However, the pace of development of these systems has been slow and hindered by budget shortfalls. For instance, the original planned production rate for SS-27 TOPOL-M ICBMs beginning in 1998 was thirty to forty missiles per year. The actual production rates, though, have been fewer than ten missiles annually.¹⁰⁷

The second difficulty is that the existing nuclear arsenal is rapidly approaching obsolescence. For example, the last SS-18 SATAN ICBM modification took place in the 1979-1983 period, with some new missiles deployed as late as 1991. Under START II terms, all SS-18s must be dismantled by 2007 (because of an ICBM MIRVing prohibition in the treaty). But even without START II restrictions, given a maximum service life extension of up to 18 years, few if any SS-18s will remain by 2010. 108

In the other legs of Russia's strategic triad (i.e., the submarine and bomber delivery systems) the story is similar. Not a single new SSBN (ballistic missile

¹⁰⁶ Ilya Klebanov quoted in ibid., 18.

¹⁰⁷ Jon Brook Wolfsthal et al., eds., *Nuclear Status Report*, no.6 (Washington, D.C.: Carnegie Endowment for International Peace; Monterey, CA: Monterey Institute of International Studies, 2001)18, 27.

¹⁰⁸ See ibid., 14; and Alexander Savelyev, "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 2-3.

submarine) has been commissioned since 1992, and most of the ships in the active fleet (apart from some Delta III and Delta IV SSBNs) will reach the end of their service lives by 2007. New submarine construction (e.g., the Project 955/Borey Class SSBN) has ground to a halt, and it is unlikely that more than three could be produced by 2010. In air power, only one TU-160 heavy bomber has been built since 1993. But here the situation is not quite as grave as with the ICBM and SLBM legs of the triad, given service lives that will carry much of the active bomber fleet to the 2010-2015 timeframe. In the situation is not quite as grave as with the ICBM and SLBM legs of the triad, given service lives that will carry much of the active bomber fleet to the 2010-2015

In sum, Russia's strategic potential to respond to a U.S. MD deployment through a vertical arms buildup is severely limited by both economic constraints and the service life limitations of the existing inventory. A consensus amongst Russian and U.S. analysts holds that regardless of what the United States does in terms of MD, and irrespective of whatever economic and military policies Russian leaders pursue in the near-term, in all likelihood the Russian strategic forces will decrease to between 1,000 and 1,500 START-accountable warheads by 2010. Russia therefore requires further arms reduction agreements (i.e., START II and START III) far more than the United States does.¹¹¹

3. Options

Despite the severe constraints on Russia's ability to engage in arms competition, Russian leaders have a range of options available to them, short of an offensive weapons buildup, which could complicate U.S. decision-making and pose a threat to U.S. national security. Three key areas will be examined—direct military posture options, proliferation and diplomatic options.

In terms of direct military posture options Russian leaders might be able to take three steps. First, Russia could retain some of its aging ICBMs past the START II elimination date of 2007. For example, a few SS-18s, SS-19s and SS-25s could

¹⁰⁹ Jon Brook Wolfsthal et al., eds., *Nuclear Status Report*, no.6 (Washington, D.C.: Carnegie Endowment for International Peace; Monterey, CA: Monterey Institute of International Studies, 2001) 24, 26, 28.

¹¹⁰ Alexander Savelyev, "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 6.

¹¹¹ See ibid., 7; and Jon Brook Wolfsthal et al., eds., *Nuclear Status Report*, no.6 (Washington, D.C.: Carnegie Endowment for International Peace; Monterey, CA: Monterey Institute of International Studies, 2001) 35.

theoretically be maintained until 2010, although most of these weapons' service lives will expire by that time.

The potential for START II's entry into force is uncertain regardless of the path the United States takes for MD. When the Russian Duma and President ratified START II in April-May 2000, Moscow attached several conditions on its entry into force (e.g., U.S. ratification of the 1997 ABM Treaty demarcation and succession agreements) that are likely to prove unacceptable to the United States Senate. Moreover, the Bush Administration has proposed eschewing additional bilateral nuclear arms control treaties between Moscow and Washington in favor of pursuing less formal means of arms control.¹¹²

A more likely military alternative would be for Russia to MIRV some of its new SS-27 TOPOL-M ICBMs. The advantage to this approach is that it would cost significantly less to MIRV existing missiles than to build additional delivery systems. Some analysts have concluded that it is within Russia's economic potential to deploy up to 200 MIRVed SS-27 missiles (carrying three warheads each) by 2010. Start Given the above estimates that the aging Russian arsenal will decrease to between 1,000 and 1,500 START-accountable warheads by 2010 without MIRVing, this means that MIRVed TOPOL-M ICBMs could bring Russia's total warhead capacity up to approximately 1,500-2,000. This, of course, assumes that Russia can maintain its production targets for new SS-27s, which thus far it has not been able to do.

Russia also could exploit countermeasures technologies, including penetration aids, at its disposal. Most Russian missile systems already incorporate relatively sophisticated capabilities in this regard as compared to the weapons that a "rogue state" might produce without external assistance. Depending on the level of sophistication of U.S. MD, Russian countermeasures might have to be improved. It is unlikely, however,

¹¹² See David S. Yost, "Russia's non-strategic nuclear forces," *International Affairs*, vol. 77. no. 3 (July 2001) 546-547; and Alexander Pikayev, "Moscow's Matrix," *The Washington Quarterly*, vol. 23, no. 3 (Summer 2000) 187.

¹¹³ Alexander Nikitin, "Russian Disarmament Dilemmas," *Nuclear Weapons: The Road to Zero*, ed. Joseph Rotblat (Colorado: Westview Press, 1998) 276.

¹¹⁴ Jon Brook Wolfsthal et al., eds., *Nuclear Status Report*, no.6 (Washington, D.C.: Carnegie Endowment for International Peace; Monterey, CA: Monterey Institute of International Studies, 2001) 18.

that Russia would find this path simpler (or less expensive) than MIRVing existing missiles.

Russian leaders could simply step up the alert status of their strategic forces in an effort to compensate for their decreasing numbers. Retention of a launch on warning posture could be deemed necessary to increase the survivability of Russia's second-strike capabilities. 115

The disturbing feature of each of Russia's military posture options is that, rather than achieving Russian leaders' objectives of restoring strategic stability with the United States, they might actually prove destabilizing. For example, Alexander Savelyev of the Russian Academy of Sciences has made the point that "by all the standards of 'strategic stability' the deployment of MIRVed ICBMs is considered as destabilizing [a] move [as MD]."116 The reason for this resides in the increased incentives to strike first against an enemy's MIRVed missiles because it is more cost-effective to destroy a MIRVed missile before its warheads separate. As to the other military posture options, the aging of Russian missiles and command and control capabilities suggests that the retention of weapons past their obsolescence or placing them on high alert postures could be highly destabilizing, because the potential for accidents and malfunctions could increase.

An alternative to confronting the perceived U.S. MD challenge through direct military posture steps could be an expansion of the proliferation of ballistic missile and WMD components and technology to other states. Such a course might serve two purposes. First, it would provide a relatively simple means for Russian leaders to complicate U.S. decision-making and to reduce U.S. MD's effectiveness. As a simple illustration, provision of basic countermeasures technologies to North Korea could significantly reduce U.S. confidence in MD reliability. Second, it might provide revenue for the Russian defense industry.

¹¹⁵ See Alexander Nikitin, "Russian Disarmament Dilemmas," *Nuclear Weapons: The Road to Zero*, ed. Joseph Rotblat (Colorado: Westview Press, 1998) 275; and Bruce Blair, "Impact of NMD on Russia, Nuclear Security," *Center for Defense Information Homepage*, 9 July 2001 http://www.cdi.org/hotspots/issuebrief/ch6/index.html>.

¹¹⁶ Alexander Savelyev, "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 11.

Several difficulties with this option suggest, however, that its worth may be questionable from a Russian viewpoint. Arms sales have not proven to be the economic panacea that the Russian defense industry had hoped. Also, selling arms to Russia's neighbors creates inherent risks for the country's security. For instance, arms sales could affect the regional balance of power in China's favor. Russia, by virtue of its geographic proximity, has far greater reason to feel threatened by nascent nuclear weapons states in areas such as the Middle East and Northeast Asia than does America.

There is a potential diplomatic aspect as well. A theme in Russia's declared opposition to U.S. MD has been that MD will break down arms control regimes that promote nonproliferation. It might be assumed that it would be politically difficult for Russia to engage in proliferation as a response to a system that Moscow had claimed was dangerous because it could lead to proliferation. However, on balance such hypothetical diplomatic challenges are unlikely to inhibit Moscow, as Russian leaders have accepted logical inconsistencies in their proliferation and MD policies in the past. As Secretary Rumsfeld stated—referring to the Russian MD position as articulated by Alexei Arbatov, the Deputy Chairman of the Russian Duma's Defense Committee—during an August 2001 interview:

that position...is basically, "look, America, you establish a policy of remaining vulnerable to ballistic missiles while we are protected by a missile defense system in Moscow and while we continue to work with other countries like China and Iran and Iraq and various other countries with respect to proliferating some technologies that are not very helpful to the rest of the world."¹¹⁷

A range of diplomatic alternatives is available to Russian leaders should they choose to respond adversely to a U.S. MD deployment. Perhaps the most alarming development (from a U.S. perspective) has been the series of Russian overtures for closer relations with China. Russia and China have aligned against U.S. interests in various ways. For example, Russia and China have coordinated efforts at curtailing U.S. MD in several important international fora such as the UN Conference on Disarmament, where jointly they have linked preservation of the ABM Treaty with important arms reduction

^{117 &}quot;Newsmaker: Donald Rumsfeld," *Online News Hour: a News Hour with Jim Lehrer Transcript*, 16 August 2001, 24 August 2001 <wysiwyg://284/http://www.pbs.org/newshou...edagencies/july-dec01/rumsfeld 8-16.html>.

initiatives and treaties. The July 2001 signing of a Sino-Russian Friendship Treaty (discussed in Chapter II), dramatically focused attention on the potential Sino-Russian bloc.

However, obvious limits to Sino-Russian cooperation make an effective anti-American alliance unlikely. The two nations have a history of enmity and share a 2,500-mile border that is not entirely stable (owing, among other factors, to migrations of ethnic Chinese into under-populated Russian territory). Furthermore, both have greater economic stakes in good relations with the United States than with one another. For instance, Sino-U.S. trade in 2000 was more than U.S. \$100 billion, while Sino-Russian trade was less than U.S. \$10 billion. 118

The most attractive diplomatic alternative available to Russian leaders, and the one likely to incur the least economic and diplomatic effort would be for Russia to simply withdraw from arms control reduction and verification regimes. Such a course may be one of the few practical options available to Russian leaders. Alexander Savelyev has suggested that apart from MIRVing some SS-27 missiles (as discussed above), "the only real 'instrument,' which Russia is able to use against the United States under present conditions is to block all kinds of information, which is flowing in accordance with arms control agreements." Moreover, as noted earlier, withdrawal from arms control agreements may suit Russian elites' preexisting preferences, as some Russian military authorities view U.S. withdrawal from the ABM Treaty as a vehicle to escape the restrictions of the START I and INF Treaties. 120

The challenge to U.S. leaders in such circumstances would be the additional uncertainties that would be created. It is important to note, however, that such actions

¹¹⁸ "Partners of Inconvenience," *The Economist*, 20 January 2001, 25 May 2001 http://web.lexisnexis.com/universe/document? ansset=Geltauko-EZERMSSEZERUUARWV>.

¹¹⁹ Alexander Savelyev, "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin"* (Monterey, CA: Naval Postgraduate School, 2001) 18.

¹²⁰ Nikolai Sokov, "Developments in Russian Nuclear Weapons Policy," presentation to U.S. Senate Armed Services Committee, 26 January 2001, 20. Also see "Press Conference with Vladimir Orlov, Yuri Fyodorov and Dmitry Yevstafyev, PIR Center Officials, on RF-US Agenda," *Federal News Service, Inc.*, official Kremlin International News Broadcast, 14 June 2001; or Vitaliy Tsygichko, *Nezavisimaya Gazeta*, 9 June 2001. Translated by the Foreign Broadcast Information Service, entitled "Academic: Russia Should Accept Bush 'Partnership' Offer, Counter China 'Threat'," 11 June 2001 (FBIS-CEP20010611000096).

could also prove harmful to Russia in that they could end programs such as the Nunn-Lugar Cooperative Threat Reduction activity, and potentially disrupt other forms of U.S.-Russian cooperation.

Russia does have a range of options available to it should it choose to react adversely to a U.S. MD deployment. This range, however, is severely limited by economic factors and/or diplomatic considerations. In terms of traditional concepts of arms competition, the most likely options assessed here would be withdrawal from arms reduction regimes and some adjustments in force posture (e.g., MIRVing SS-27 ICBMs, retaining some older MIRVed ICBMs and enhancing the alert posture). The likelihood of an offensive arms buildup (e.g., a significant increase in delivery systems) is remote at best, however.

C. CONCLUSIONS

Russian opposition to U.S. MD has likely been guided by numerous considerations. Trends of the post-Cold War era have placed the Russian state in an increasingly weak and defensive role vis-à-vis the West. Russian hopes for rapid democratization and acceptance as a major player in the Euro-Atlantic region have been disappointed. In the wake of sustained and severe economic and military decline, events such as the Kosovo War have helped to highlight (in Russian eyes) Russia's diminishing influence in international affairs and the new levels of U.S. ascendancy. Furthermore, as other measures of Russian power have declined, military power (most especially nuclear strength) has taken on increased significance in a state accustomed historically to equate military might with regime legitimacy.

The potential consequences of such trends for U.S. MD deployment are that: (a) Russian leaders may mistakenly believe that U.S. MD is aimed at Russia, (b) Russia may assess U.S. MD as a threat to Russian security, and (c) Russian leaders may fear that U.S. MD will threaten Russia's sole remaining claim to superpower status—its nuclear might. Arms race theory suggests that any of these perceptions could create incentives for arms competition.

Russia's capacity to engage in arms competition is severely limited by its economic condition. It seems highly unlikely that a vertical arms race with the United

States is possible in the foreseeable future. This does not mean that Russia is without options, however. Of the range of military and diplomatic alternatives available to Russian leaders the most likely course would be withdrawal from arms reduction and verification regimes in combination with relatively minor adjustments to Russia's strategic force posture (e.g., MIRVing SS-27 ICBMs and maintaining higher alert postures).

On balance, it appears that considerations of Russian prestige may underlie many of the Russian leaders' objections to MD. In fact, prestige issues may be fueling Russian perceptions of U.S. hegemonism and strategic threat. This common thread may offer insight into the potential for success of the current efforts to achieve a U.S.-Russian compromise over MD.

In this regard, the 22 July 2001 joint statement made by Presidents Bush and Putin may prove to be a significant turning point:

We agreed that major changes in the world require concrete discussions of both offensive and defensive systems. We already have some strong and tangible points of agreement. We will shortly begin intensive consultations on the interrelated subjects of offensive and defensive systems. 121

By dealing with Putin as an equal, President Bush is granting important recognition of Russia's status as a major world power. Furthermore, by linking U.S.-Russian offensive arms reduction talks with MD consultations, Presidents Bush and Putin may both be able to declare a diplomatic victory. "Putin has to bring something home to soothe the generals, placate public opinion, and ease the crisis of Russian security. Sharp reductions in the United States strategic arsenal would be undeniably good for Russian security and would be seen as a political victory for Putin." At the same time, by winning Russian acceptance for U.S. MD deployments, President Bush can address some of the main concerns of domestic and European opponents of MD.

^{121 &}quot;Joint Statement by U.S. President George W. Bush and President of the Russian Federation Vladimir V. Putin on Upcoming Consultations on Strategic Issues," released by the White House Office of the Press Secretary, 22 July 2001, 29 August 2001 http://www.whitehouse.gov/news/releases/2001/07/20010723-10.html>.

¹²² Robert Hey, "Why Bush, Putin Struck a Deal," *The Christian Science Monitor*, 23 July 2001, 1.

The prospects for the present consultations hold some promise, despite serious continuing disagreements, because they deal with the key concerns of Russian leaders described in this chapter. It is noteworthy that during a press briefing on the September 2001 U.S.-Russian MD consultations Colonel-General Yuri Baluyevsky, Deputy Chief of the Russian Armed Forces General Staff, had the following to say regarding what Russia might do if the United States unilaterally withdraws from the ABM Treaty:

It will continue the dialogue on the new strategic relationship...I hope we [the United States and Russia] are expressing a common point of view that these confidential relations will continue in any form. The withdrawal of the United States from the ABM Treaty will not cancel these relations that will continue because we live in a world where you can't solve problems except on this basis. 123

^{123 &}quot;Press Briefing by Deputy Chief of the Russian Armed Forces General Staff Yuri Baluyevsky and U.S. Under Secretary of Defense Douglas Feith," press briefing held at the Russian Ministry of Defense in Moscow, 11 September 2001, released by the Office of the United States Under Secretary of Defense.

IV. CONCLUSIONS

The United States government intends to deploy missile defenses to protect America and its allies from the emerging ballistic missile threat posed by "rogue" states. This danger to U.S. national security is significant and growing. President Bush made clear the current U.S. course in his May 2001 address at the National Defense University:

To maintain peace, to protect our own citizens and our own allies and friends, we must seek security based on more than the grim premise that we can destroy those who seek to destroy us. This is an important opportunity for the world to re-think the unthinkable, and to find new ways to keep the peace...We need new concepts of deterrence that rely on both offensive and defensive forces. Deterrence can no longer be based solely on the threat of nuclear retaliation. 124

This new direction for U.S. policy has inherent risks that should be considered. The goal of enhanced U.S. national security may not be achieved if U.S. deployment of MD incites increased animosities with Russia. In view of this risk, this thesis has attempted to assess what Russian reactions to a U.S. MD deployment might be. The thesis has examined both the incentives driving Russian decision-making and the economic and military capacity of Russia to engage the United States in arms competition.

In concluding this thesis, two questions remain to be discussed. First, what are the potential implications for U.S. policy of the Russian case study findings? Second, what areas for further research are suggested by this analysis?

A. FINDINGS AND U.S. POLICY IMPLICATIONS

The declaratory policies and actions of Russian leaders have, until very recently, indicated strong opposition to U.S. plans to deploy a MD capability. U.S. MD proponents have argued that: (a) U.S. intentions in seeking a MD system are clear; and (b) U.S. MD poses no threat to Russia's huge nuclear arsenal. However, several factors have contributed to Russian concerns over U.S. MD.

Key U.S. decisions in the 1990s helped to foster a Russian view that U.S. intentions have become increasingly aggressive and hegemonic. NATO expansion and the United States-led NATO intervention in the Kosovo conflict in March-June 1999

¹²⁴ George W. Bush, "Remarks by the President to Students and Faculty at National Defense University," Fort Lesley J. McNair, Washington, D.C., 1 May 2001 http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html.

appear to have contributed to Russian perceptions of a growing U.S. threat. NATO's Kosovo intervention in particular exacerbated a belief that Russia had lost influence in international politics. It also encouraged the perception (however mistaken) that the United States and its allies were willing to act outside the constraints of international law to achieve their political objectives, because the NATO allies used force without an explicit UN Security Council resolution authorizing them to do so.

Concomitant with growing Russian apprehensions over U.S. intentions, Russia experienced dramatic economic decline in the 1990s; and this likely served to further aggravate Russian feelings of vulnerability. With an economy faring little better today than that of many Third World states, in economic terms Russia has become a secondary power. Moreover, this trend does not appear likely to abate in the near term given the lack of the institutions necessary to end rampant corruption in Russia and bring about fundamental economic reforms. As other indicators of strength have deteriorated (e.g., economic and diplomatic influence), military strength—in particular, nuclear might—has arguably become Russia's sole remaining claim to superpower status. To the extent that U.S. MD diminishes this bulwark of Russia's military posture and this last vestige of Russian great power status, at least in Russian eyes, it poses a serious threat to Russia's national security and international standing.

Arms race theory suggests that the above dynamics could create strong incentives for Russian arms race activity following a U.S. MD deployment. Although Russian abilities to engage in arms competition are limited, Russian leaders have a range of diplomatic and military posture responses available to them that could significantly affect U.S. national security.

Although this thesis has not surveyed an all-inclusive list of potentially relevant factors, it has concluded that incentives created by misperceptions of aggressive intent, calculations of strategic vulnerability, and concerns about national prestige may be the most significant factors. On balance, the issue of prestige appears to dominate. It is noteworthy, however, that these three incentives are linked to a large degree. Issues of prestige, for example, likely fuel Russian perceptions of U.S. aggressive intentions and

encourage greater attention to calculations of the strategic balance. These findings suggest three important areas of focus for U.S. MD policy vis-à-vis Russia.

First, increased clarity and transparency in U.S.-Russian MD discourse are essential to curb Russian perceptions of U.S. aggressive intent. In this regard, diplomatic efforts such as the United States hosting of a conference for senior members of the Russian military staff in August 2001 to better explain U.S. MD plans (in terms of architecture and capabilities) have been extremely promising. 125

Second, the extent of U.S. MD deployment should be weighed in light of: (a) U.S. objectives of eliminating threats of coercion, blackmail and attack from nascent missile states; and (b) Russia's concerns over strategic vulnerability. Although this analysis has concluded that it is unlikely that any presently conceived level of U.S. MD capability could negate the Russian strategic nuclear deterrent over the coming decade, the impact of U.S. MD on Russia's nuclear capabilities could be significant under certain conditions and could increase over time. This insight suggests that a degree of restraint in U.S. MD deployment may be advisable in order to minimize the potential for adverse Russian reactions. Given the limited technological and material resources of most "rogue states," a balance should be achievable—with respect to U.S. MD deployment levels—to reconcile the goals of (a) countering the threat of emerging missile states and (b) pursuing enhanced relations with Russia.

Third, Russian concerns about diminishing international prestige may be partially alleviated simply through continued dealings with Russia's leaders. The Bush Administration has already taken several important steps in this regard. The July 2001 G8 Conference in Genoa sent a clear signal that the United States, while resolved to pursue MD, views Russian security concerns as important.

By linking U.S. offensive arms reductions with further MD consultations, the above three areas of potential U.S.-Russian compromise are being addressed in parallel by the Bush Administration. First, the focus on increased dialogue and information exchanges has likely aided in reducing Russian apprehensions about U.S. intentions.

^{125 &}quot;Russia Gets Details of Missile Shield: Secret meeting ties Bush defense to cuts in nuclear arms," *Reuters News Agency*, 8 August 2001.

Second, U.S. offensive arms reductions in conjunction with MD deployment may serve to alleviate Russian perceptions of a growing U.S.-Russian strategic imbalance. Most significantly, when U.S. leaders treat Russian leaders as virtually equal partners at the bargaining table, they are implicitly recognizing Russia's major power status.

It remains to be seen if the present U.S.-Russian consultations will be successful. Periods of apparent rapprochement in the past have ended in dispute. As discussed in Chapter III, for example, plans for U.S.-Russian cooperation in developing a Global Protection System showed significant promise in the early 1990s, but were abandoned by the Clinton Administration. The analysis in this thesis, however, supports the conclusion that the Bush Administration's current strategy for addressing Russian security concerns has significant potential for achieving a breakthrough in the highly contentious U.S.-Russian debate over missile defenses.

B. SUGGESTIONS FOR FURTHER RESEARCH

Three areas are recommended for further research. First, several factors potentially influencing Russian reactions to U.S. MD could be addressed in greater depth. Chapter II briefly described the role of intra-state forces (e.g., institutional and bureaucratic actors) in contributing to state decision-making. Insofar as the reactions of Russian leaders to U.S MD do not merely reflect monolithic views of the state, the various domestic pressures and negotiations taking place in Russia need to be considered when assessing U.S. MD policy options. For example, the significant influence of Russian military and military-industrial elites may loom large in Russian policy choices with regard to MD.

Second, the analysis of U.S. MD's likely effectiveness and impact on U.S.-Russian strategic relations was limited in this assessment by a paucity of available unclassified data concerning U.S. MD plans. As the Bush Administration's plans for MD are clarified, and the potential effectiveness of MD becomes understood with greater precision through the course of further testing and development, more detailed analyses of the potential impact of U.S. MD on Russia's strategic nuclear deterrent capability should be conducted.

Finally, the analytical framework utilized in this thesis may be useful in assessing the potential reactions of other states concerned by a U.S. MD deployment. In particular, the reactions of China to U.S. MD could be important for U.S. national security. Although Russia is viewed with greatest concern in the near term, due to its possession of nuclear forces capable of utterly destroying the American homeland, China's growing economic and military strength could pose a long-term threat to U.S. interests. The declaratory positions of Chinese leaders have been remarkably similar to those of Russian elites with regard to U.S. MD. This suggests that many of the arms competition incentives outlined in Chapter II could play a role in shaping Chinese policy choices. There are, of course, many differences between the Russian and Chinese cases (e.g., divergent cultural and historical contexts, and differing strategic objectives). A detailed assessment of Chinese reactions, utilizing a methodology similar to that employed by this thesis, might prove helpful in understanding the unique aspects of the Chinese case. Thus, one might identify ways to minimize the prospect of arms competition with this other major potential rival as the United States proceeds to deploy an MD capability.

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APPENDIX A. TECHNICAL COMPONENTS DEPLOYED AT EACH STAGE OF MISSILE DEFENSE

The Bush Administration's plan for U.S. MD has yet to be announced. Furthermore, many elements of the system (e.g., test schedules, architecture, and alliance participation) are still in the development phase. Given these caveats, however, some basic assumptions about the potential MD deployment progression may be deduced by referring to the Clinton Administration's plans. Two independent MD program assessments were conducted in 2000—one by the United States General Accounting Office (GAO) and the other by the Congressional Budget Office (CBO). These assessments provide unclassified details about the component specifications and expected deployment timing for the threshold capability 1 (C1), expanded C1, and capability 3 (C3) utilized in the Chapter III Russian case study. The data are presented in Table 2.

Table 2. Levels of MD Capability Through 2011

	Threshold C1	Expanded C1	C3
Interceptors	20	100	250
Launch Sites ^a	1	1	2
X-Band Radars	1	1	9
Upgraded Early Warning Radars	5	5	6
Communications Facilities	3	3	5
Early-Warning Satellites (SBIRS-high) ^b	2	4	5
Warhead-Tracking Satellites (SBIRS-low)	0	6	24
Deployment Date	2005	2007	2011

After: Congressional Budget Office and General Accounting Office Studies

a. Number of "kill vehicles" and their associated booster rockets

b. Existing Defense Support Program satellites will also be used for MD.

¹²⁶ See United States General Accounting Office, *Missile Defense: Status of the National Missile Defense Program* (Washington, D.C.: General Accounting Office, May 2000) 15; and Congressional Budget Office, "Budgetary and Technical Implications of the Administration's Plan for National Missile Defense," *Congressional Budget Office Homepage*, April 2000, 10 August 2001 http://www.cbo.gov/showdoc.cfm?index=1984&sequence=0&from=5.

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BIBLIOGRAPHY

- "Administration Missile Defense Papers," White House cable. *Carnegie Endowment for International Peace Homepage* http://www.ceip.org/files/projects/npp/resources/EmbassyCableMD.html, 11 July 2001.
- Aris, Ben. "Military Finds Strength in Chechnya War." San Diego Union-Tribune, 24 November 1999.
- Blair, Bruce. "Impact of NMD on Russia, Nuclear Security," *Center for Defense Information Homepage* http://www.cdi.org/hotspots/issuebrief/ch6/ index.html>, 9 July 2001.
- Bush, George W. "Remarks by the President to Students and Faculty at National Defense University." Prepared remarks of President George W. Bush at Fort Lesley J. McNair, Washington, D.C. http://www.whitehouse.gov/new/releases/2001/05/20010501-10.html, 1 May 2001.
- "China: Who's Real Threat to World Peace?" China Daily, 5 July 2001.
- Cohen, William S. "Preparing for a Grave New World." *The Washington Post*, A19, 26 July 1999.
- Congressional Budget Office. "Budgetary and Technical Implications of the Administration's Plan for National Missile Defense," *Congressional Budget Office Homepage* http://www.cbo.gov/showdoc.cfm?index=1984 & sequence=0& from=5>, April 2000.
- Ewing, Lee. "Why 'National' Has Been Dropped From 'National Missile Defense'." *Aerospace Daily*, 12 March 2001.
- Felgenhauer, Pavel. "Reactions to NMD Deferral." *The Moscow Times*, No. 2039, 7 September 2000.
- Forden, Geoffrey and Raymond Hall. United States. Congressional Budget Office.

 *Budgetary and Technical Implications of the Administration's Plan for National Missile Defense http://www.cbo.gov/showdoc.cfm?index=1984&sequence=0&from=5, April 2000.
- Friedman, Alan. "Singapore Is Ranked Most Competitive." *International Herald Tribune*, p. 11, 14 July 1999.
- Goldgeier, James M. *Not Whether But When: The U.S. Decision to Enlarge NATO*. Washington, D.C.: Brookings Institute Press, 1999.

- Gordon, Michael. "Putin Seeks Allies in Quest to Fight U.S. Missile Plan." *The New York Times*, 10 June 2000.
- Gray, Colin S. "The Urge to Compete: Rationales for Arms Racing." *World Politics*, vol. 26, pp. 207-233, January 1974.
- Guiling, Lin. "Russia Readjusts Strategy in Face of Reality." *Renmin Ribao*,

 Translated by the Foreign Broadcast Information Service, entitled "Renmin Ribao Views Russian Strategy Change," (FBIS-FTS199990703000212), 2 July 1999.
- Hadley, Stephen. "Global Protection System: Concept and Progress." *Comparative Strategy*, vol. 12, pp. 3-5, January-March 1993.
- Hall, Gwendolyn, John Cappello and Stephen Lambert. *A Post-Cold War Nuclear Strategy Model*. USAF Academy: USAF Institute for National Security Studies, 1998.
- Handler, Joshua. "Russia's Nuclear Strategic Forces in 2008-2013." Conference entitled *New Challenges in the Spread of Weapons of Mass Destruction*, September 23-26, 1999.
- Harada, Chikahito. *Russia and Northeast Asia*. New York: Oxford University Press, 1997.
- Harvey, Frank P. "The International Politics of National Missile Defense: A Response to the Critics." *International Journal*, vol. 55 (4), pp. 545-566, September 2000.
- Heintz, Jim. "Putin Won't Pressure North Korea." The Associated Press, 11 June 2000.
- Hey, Robert. "Why Bush, Putin Struck a Deal." *The Christian Science Monitor*, p. 1, 23 July 2001.
- Hobbes, Thomas. *Leviathan*. Richard Tuck, ed. Cambridge, England: Cambridge University Press, 1991.
- Holum, John D. Address to the Conference on International Reactions to U.S. National and Theater Missile Defense Deployments, Stanford University, Palo Alto, California, *U.S. Department of State Homepage* http://usinfo.state.gov/topical/pol/arms/stories/holstanf.htm, 3 March 2000.
- "In the Treaty's Words: 'International Stability'," *New York Times on the Web* http://partners.nytimes.com/2001/07/17/i.../17RUSS.html, 11 July 2001.
- Jervis, Robert. *Perceptions and Misperceptions in International Politics*. New Jersey: Princeton University Press, 1976.

- "Joint Chiefs Oppose Russian Plan to Cut 1,000 U.S. Warheads," *Washington Times*http://www.washtimes.com/archives.htm>, 11 May 2000.
- "Joint Communiqué on the Signing of the ABM Treaty Documents." Released by the Office of the Spokesman, U.S. Department of State http://www.state.gov/www/global/arms/970926_abm_jtcomm.html, 26 September 1997.
- "Joint Statement by the Presidents of the United States of America and the Russian Federation on Principles of Strategic Stability." Released by the Office of the Press Secretary, 4 June 2000.
- "Joint Statement by U.S. President George W. Bush and President of the Russian Federation Vladimir V. Putin on Upcoming Consultations on Strategic Issues," released by the Whitehouse Office of the Press Secretary http://www.whitehouse.gov/news/releases/2001/07/20010723-10.html, 22 July 2001.
- "Joint United States-Russian Statement on a Global Protection System."

 Public Papers of the Presidents of the United States (1992-93), Book I.

 Washington, D.C.: Government Printing Office, 1993 http://www.bushlibrary.tamu.edu/papers/1992/9206/92061703.html, 17 June 1992.
- Leicester, John. "Yeltsin Lashes Out at Clinton for Criticizing the Chechen War," *The Associated Press* http://www.amrillonet.com/stories/121099/usn LA0731.001.shtml, 10 December 1999.
- Lewis, Dana. "China, Russia Sign Friendship Treaty," *MSNBC Staff and Wire Reports* ">"> 16 July 2001.">http://www.msnbc.com/news/600697.asp?0si=->, 16 July 2001.
- "Lieutenant General Ronald Kadish Holds News Briefing on NMD." *Federal Document Clearing House, Inc. Political Transcripts*, a Defense Department regular news briefing, 20 June 2000.
- Lieven, Anatol. "The Weakness of Russian Nationalism." *Survival*, vol. 41, no. 2, pp. 53-55, Summer 1999.
- Malia, Martin. *The Soviet Tragedy: A History of Socialism in Russia. 1917-1991.* New York: The Free Press, 1994.
- "Newsmaker: Donald Rumsfeld," *Online News Hour: a News Hour with Jim Lehrer Transcript* <wysiwyg://284/http://www.pbs.org/newshou ...edagencies/july-dec01/rumsfeld 8-16.html>, 16 August 2001.
- Nikitin, Alexander. "Russian Disarmament Dilemmas," in *Nuclear Weapons: The Road to Zero*. Joseph Rotblat, ed. Colorado: Westview Press, 1998.

- "Nuclear Notebook." NRDC. *Bulletin of the Atomic Scientists*, vol. 57, no.3, pp. 78-79, May/June 2001.
- Odom, William E. "Russia's Several Seats at the Table." *International Affairs*, vol. 74, pp. 814-819, October 1998.
- O'Hanlon, Michael. "Star Wars Strikes Back." *Foreign Affairs*, pp. 71-72, November-December 1999.
- "Partners of Inconvenience," *The Economist* http://web.lexis-nexis.com/universe/document? ansset=Geltauko-EZERMSSEZERUUARWV>, 20 January 2001.
- Perlez, Jane. "Russian Aide Opens Door a Bit to U.S. Bid for Missile Defense." *The New York Times*, late ed., A3, 19 February 2000.
- Peterson, Scott. "Moscow's Offense Against US Missile Defense." *The Christian Science Monitor*, 14 March 2001.
- Pikayev, Alexander A. "Moscow's Matrix." *The Washington Quarterly*, vol. 23, no. 3, p. 187, Summer 2000.
- Piontkovsky, Andrei and Vitaly Tsigichko. "Tango with Russia." *Defense and Security*, 16 February 2001.
- "Press Briefing by Deputy Chief of the Russian Armed Forces General Staff Yuri Baluyevsky and U.S. Under Secretary of Defense Douglas Feith." Press briefing held at the Russian Ministry of Defense in Moscow. Released by the Office of the United States Under Secretary of Defense, 11 September 2001.
- "Press Conference with Vladimir Orlov, Yuri Fyodorov and Dmitry Yevstafyev, PIR Center Officials, on RF-US Agenda." *Federal News Service, Inc.*, official Kremlin International News Broadcast, 14 June 2001.
- Putin, Vladimir. *The Foreign Policy Concept of the Russian Federation* http://www.mid.ru/mid/eng/econcept.htm>, 28 June 2000.
- _____. 2000 Russian National Security Concept http://www3.itu.int/MISSIONS/Russia/russiastrat2000.htm, 10 January 2000.
- Putin, Vladimir, Nataliya Gevorkyan, Natalya Timakova and Andrei Kolesnikov. First Person: An Astonishingly Frank Self-Portrait by Russia's President. Catherine A. Fitzpatrick, trans. New York: Public Affairs, 2000.
- Rogov, Sergey. *Russia: The Difficult Road to a Market Economy*. Alexandria, VA: Center for Naval Analyses, 1996.

- Rumsfeld, Donald H. Remarks at the Munich Conference on European Security Policy, *U.S. Department of Defense Homepage* http://www.defenselink.mil/speeches/2001/s20010203-secdef.html, 3 February 2001.
- "Russia Gets Details of Missile Shield: Secret Meeting Ties Bush Defense to Cuts in Nuclear Arms." *Reuters News Agency*, 8 August 2001.
- "Russia Launches Drive to Upgrade its Strategic Nuclear Weapons," *Special to the World Tribune.COM* http://www.worldtribune.com/...ive-2000/eu-russia-04-07.html, 8 April 2000.
- Russian Economic Trends, Monthly Update, Table 6: Social Indicators, 10 March 2000.
- Sanger, David. "Bush and Putin Tie Antimissile Talks to Big Arm Cuts." *The New York Times*, 23 July 2001.
- Saradzhyan, Simon. "U.S. MD Effort Fueling Russia's New Missile Plan." *Defense News*, 10 July 2000.
- Sastry, M. Anjali, Joseph J. Romm, and Kosta Tsipis. "Can the U.S. Economy Survive a Few Nuclear Weapons?." *Technology Review*, vol. 92, pp. 24-28, April 1989.
- Savelyev, Alexander. "Russian Strategic Forces: Their Future and the Issue of BMD," *A Paper for the Conference on "The Russian National Security Policy Under Putin."* Monterey: Naval Postgraduate School, 2001.
- Shlykov, Vitaly V. *The Crisis in the Russian Economy*. Carlisle Barracks, Pennsylvania: Strategic Studies Institute, 1997.
- _____. "Resource Allocation for the Military and Military Reform in Russia," *A Paper for the Conference on "The Russian National Security Policy Under Putin."* Monterey: Naval Postgraduate School, 2001.
- Sodorov, Vasily S. and Wang Xiaoyu. "Russian-Chinese Press Communiqué on Consultations on Issues Related to the ABM Treaty," UN Conference on Disarmament, Document CD/1584 http://www.unog.ch/disarm/curdoc/1584.htm, 28 April 1999.
- Sokov, Nikolai. "Developments in Russian Nuclear Weapons Policy." Presentation to U.S. Senate Armed Services Committee. p. 20, 26 January 2001.
- _____. "Overview: An Assessment of the Draft Russian Military Doctrine," *Center for Nonproliferation Studies Reports*http://cns.miis.edu/pubs/reports/sokov.htm, October 1999.

- _____. "Russia's New National Security Concept: The Nuclear Angle," *Center for Nonproliferation Studies Reports* http://cns.miis.edu/pubs/reports/sokov2.htm, 22 August 2001.
- The START Treaty and Beyond. Washington, D.C.: Congressional Budget Office, 1991.
- "Transcript of a July 22 Press Conference by President Bush and President Putin." *U.S. Newswire Inc.*, released by the Office of the Press Secretary, 22 July 2001.
- Transition Report Update: Economic Transition in Central and Eastern Europe, the Baltic States, and the CIS. London: European Bank for Reconstruction and Development, 2000.
- Tsygichko, Vitaliy. *Nezavisimaya Gazeta*. Translated by the Foreign Broadcast Information Service, entitled "Academic: Russia Should Accept 'Partnership' Offer, Counter China 'Threat'," 11 June 2001 (FBIS-CEP20010611000096), 9 June 2001.
- Tyler, Patrick E. "'Contradictory' U.S. Words on ABM Issue Puzzle Russia," *The New York Times* http://www.nytimes.com/2001/07/14/international/14RUSS.html, 14 July 2001.
- _____. "Russia and China Sign 'Friendship' Treaty," *New York Times on the Web* http://partners.nytimes.com/2001/07/17/i.../17RUSS.html, 17 July 2001.
- United States General Accounting Office. *Missile Defense: Status of the National Missile Defense Program.* Washington, D.C.: GAO, May 2000.
- Virkunen, Valery. "Capital Flees Russia at a Rate of U.S. \$1 Billion a Month." *Prism*, vol. 5, no. 20, 17 December 1999.
- Wallander, Celeste A. "Russian National Security Policy in 2000." *Program on New Approaches to Russian Security Policy Memo Series*, Harvard University http://www.fas.harvard.edu/~ponarsPOLICY%20MEMOS/Wallander102.html, January 2000.
- Weinberg, Alvin and Jack Barkenbus. *Strategic Defenses and Arms Control*. New York: Paragon House Publishers, 1988.
- Weldon, Curt. "Defense of America's Homeland." Address to the House of Representatives, *Federation of American Scientists Homepage* http://fas.org/news/usa/2001/usa-010502a.htm, 02 May 2001.
- Wilkening, Dean and Kenneth Watman. *Strategic Defenses and First-Strike Stability*. Santa Monica, CA.: RAND Corporation, 1986.

- Wilkening, Dean. "The Evolution of Russia's Strategic Nuclear Forces" <cisac.stanford.edu/docs/russianforces.pdf>, July 1998.
- Wolfsthal, Jon Brook et al., eds. *Nuclear Status Report*, no.6, Washington, D.C.: Carnegie Endowment for Intl. Peace; Monterey: Monterey Inst. of Intl. Studies, pp. 18-35, 2001.
- Yost, David S. *NATO Transformed: The Alliance's New Role in International Security.* Washington, DC: United Institute of Peace Press, 1998.
- _____. "Russia's Non-Strategic Nuclear Forces." *International Affairs*, vol. 77, no. 3, pp. 532-47, July 2001.
- Zemin, Jiang. "Statement by President Jiang Zemin of the People's Republic of China at the Millennium Summit of the United Nations" http://www.fmprc.gov.cn/eng/5849.html, 7 September 2000.

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